Safety

Safety Program

Headquarters U.S. Army Medical Department Activity Fort George G. Meade 2480 Llewellyn Avenue Fort George G. Meade, MD 20755-5800 8 May 2003

Unclassified

SUMMARY of CHANGE

MEDDAC/DENTAC/VS REG 385-1 Safety Program

Specifically, this revision—

- o Has been published in a new format that includes a cover and this "Summary of Change" page.
- o Reformats the title page. The Contents section now includes the page numbers that the various chapters and paragraphs begin on.
- o Moves MEDDAC Form 714-R from the back of appendix C to the R-Forms section at the back of the regulation (appendix C, para C-3).
- o Makes numerous changes throughout the regulation.

Department of the Army Headquarters United States Army Medical Department Activity 2480 Llewellyn Avenue Fort George G. Meade, Maryland 20755-5800 8 May 2003 * MEDDAC/DENTAC/VS Regulation 385-1

Safety

Safety Program

FOR THE COMMANDER:

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JOHN SCHNEIDER Adjutant **History.** This is the third revision of this publication, which was originally published on 17 April 1998.

Summary. This regulation establishes responsibilities, policies, and procedures for the Safety Program.

Applicability. This regulation applies to Headquarters, U.S. Army Medical Department Activity, Fort George G. Meade (MEDDAC) (that is, Kimbrough Ambulatory Care Center (KACC)), all outlying U.S. Army health clinics (USAHCs), the U.S. Army Dental Activity, Fort George G. Meade (DENTAC), and the Fort Meade Branch Veterinary Services (VS).

Proponent. The proponent of this regulation is the Safety Officer.

Supplementation. Supplementation of this regulation is prohibited.

Suggested improvements. Users of this publication are invited to send comments and suggested improvements, by memorandum, directly to the Commander, U.S. Army Medical Department Activity, ATTN: MCXR-SO, Fort George G. Meade, MD 20755-5800, or to the MEDDAC's Command Editor by fax to (301) 677-8088 or e-mail to john.schneider@na. amedd.army.mil.

Distribution. Distribution of this regulation is electronic medium only.

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^{*} This publication supersedes MEDDAC/DENTAC/VS Reg 385-1, dated 19 October 2001.

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Chapter I Introduction

1-1. Purpose

This regulation prescribes policies, procedures and responsibilities for administration of the Safety Program within the MEDDAC, to KACC, all outlying USAHCs, DENTAC and VS. (Hereafter, the phrase "the command" will be used to represent the entire MEDDAC, DENTAC and VS.)

1-2. References

Required and related publications are listed in appendix A. Referenced forms are also listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Authority statement

The Safety and Environment of Care Committee or the Safety Officer has command authority to intervene whenever conditions pose an immediate threat to life or health, or threaten damage to equipment or buildings.

1-5. How this regulation applies to the outlying clinics

Much of this regulation is written in such a way as to address procedures at Fort Meade or at KACC. To address the various procedures within this regulation as they variously apply to each and every facility would result in a huge and unwieldy directive. Therefore, it has been deemed best, for the most part throughout this regulation, to address procedures as they apply at Fort Meade or KACC, and for the commanders, directors and chiefs of the several outlying clinics develop similar procedures for their own facilities. This concept applies throughout this regulation, to include the appendixes.

Chapter 2 Responsibilities

2-1. The MEDDAC Commander

The MEDDAC Commander will—

- a. Provide a safe and healthful environment for patients, staff and visitors, and implement an effective, comprehensive safety program for the command.
- b. Designate a safety manager to develop, implement, manage and monitor a comprehensive safety program. The safety manager will report directly to the commander or Deputy Commander for Administration (DCA) on all matters relating to safety and occupational health (OH).
 - c. Integrate the safety risk management process to identify and control hazards.

2-2. The DENTAC Commander; Chief, VS; and commanders, directors and chiefs of outlying USAHCs

The DENTAC Commander, Chief, VS, and commanders, directors and chiefs of outlying USAHCs will—

- a. Provide a safe and healthful environment for patients, staff and visitors, and implement an effective comprehensive safety program.
- b. Appoint a primary and alternate collateral duty safety officer (CDSO) in writing to assist the MEDDAC Safety Officer in executing the Safety Program.
 - c. Integrate the safety risk management process to identify and control hazards.
- d. Direct that safety responsibilities are a rating element in the performance standards of all officers, noncommissioned officers (NCOs), and civilian supervisors.
- e. Ensure that the safety officer attends core safety and occupational health training within six months of being assigned CDSO duties.
- f. Ensure the CDSO receives visibility, time and authority needed to accomplish CDSO duties.
 - g. Ensure the CDSO attends mandatory training sessions.

2-3. The DCA

The DCA will—

- a. Serve as chairperson of the MEDDAC Safety and Environment of Care Committee.
- b. Provide for overall staff supervision of the environment of care (EC) management programs.
- c. Ensure that administrative and financial support are available to promote an effective Safety Program.
- d. Direct that safety responsibilities are a rating element in the performance standards of all officers, NCOs and civilian supervisors.

2-4. The Safety and Environment of Care Committee

The Safety and Environment of Care Committee will—

- a. Meet bimonthly.
- b. Be composed of EC program managers and representatives from administration, clinical services and support services.
- c. Inform the Governing Body of the status of MEDDAC compliance with JCAHO EC standards.
- d. Direct the ongoing organization-wide collection of information about deficiencies and opportunities for improvement. Review and analyze information relating to EC management programs and review summaries of deficiencies, problems, failures, and user errors related to managing safety, security, hazardous materials and waste, emergency preparedness, life safety, medical equipment and utility systems.
- e. Ensure that annual EC program reviews are completed in accordance with (IAW) JCAHO standards.
- f. Make recommendations to develop, implement and revise, and monitor the effectiveness of EC management programs.
- g. Ensure performance indicators are established, monitored and reported for each EC program. One MEDDAC performance indicator will be elevated to the Governing Body annually.
- h. Participate in the development of safety policies and procedures, ensuring that safety policies and procedures are reviewed annually and published as necessary, but not less than every three years.
 - i. Forward minutes of committee meetings to the Performance Improvement (PI) Committee.

Disseminate information through the minutes to administrative clinical areas and support services and to outlying clinics.

2-5. The Chief, Preventive Medicine Service (PM)

- a. Ensure coordination and information exchange is maintained with the Safety Officer and the Safety and Environment of Care Committee on all occupational health, environmental, industrial hygiene, and radiation protection concerns relevant to the command's healthcare facilities.
 - b. Provide industrial hygiene (IH) support for the Respiratory Protection Program.
- c. Manage the Occupational Health Program to provide pre-placement, termination and other required physical examinations.
- d. Maintain a database of MEDDAC personnel who use Personnel Protective Equipment (PPE) (for example, hearing, eye and respiratory).
- e. Coordinate requests for purchase and/or issue of hearing protection and/or respiratory protective equipment.
- f. Ensure the Radiation Protection Program complies with appropriate standards of TB MED 521 and pertinent federal regulations.

2-6. The Medical Company Commander

The Medical Company Commander will monitor the snow removal plan in MEDDAC Regulation 210-10, and will update the regulation as necessary.

2-7. The Chief, Logistics Division (LOG)

The Chief, LOG will—

- a. Ensure Interim Life Safety Measures (ILSMs) are developed and followed to temporarily compensate for the hazards posed by existing Life Safety Code (LSC) deficiencies or construction activities.
- b. Ensure that all safety requirements are included in all purchase requests for materials and equipment (for example, chemicals, electrical and non-electrical machinery, furniture, draperies and decorations). Contact the Safety Officer for guidance when necessary.
- f. Ensure that Oxygen Quality Assurance Program procedures are established, and that training and supervision are accomplished.
- g. Report and take action on product safety recalls when notified by regulatory agencies or manufacturers.
- h. Support the Hazardous Waste (HW) Program by appointing a primary and alternate HW Coordinator.

2-8. The Chief, Plans, Training, Mobilization and Security Division (PTM&S)

The Chief, PTM&S will—

- a. Manage the Emergency Preparedness Plan and Program IAW JCAHO standards.
- b. Manage the Security Plan and Program IAW JCAHO standards.
- c. Incorporate safety training into birthmonth annual training and maintain a training database.
- d. Ensure that pertinent safety considerations are incorporated into all aspects of field training exercises as well as internal and external disaster plan drill exercises. Safety briefings will be conducted prior to each exercise for all personnel involved.

2-9. The Environmental Science Officer (ESO)

The ESO will—

- a. Manage the Hazardous Materials and Wastes Plan and Program IAW JCAHO standards and federal, state and local regulations.
- b. Ensure coordination and information exchange is maintained with the Safety Officer and Safety Committee concerning all hazardous waste and materials issues (spills, segregation, storage, and transport, and corrective actions taken).
 - c. Assist the safety representative with hazardous materials and HW training.

2-10. Chiefs/supervisors of departments, divisions, services, and clinics

Chiefs/supervisors of departments, divisions, services and clinics will—

- a. Ensure a safe and healthful environment is maintained at all times and that relevant safety regulations, policies and procedures are accessible to all personnel on all shifts.
- b. Appoint in writing a primary and alternate collateral duty safety representative. Forward a copy of the orders to the Safety Officer.
- c. Ensure that MEDDAC Form 7 (Monthly Hazard Surveillance/Fire Inspection Checklist) is completed and forwarded to the Safety Office.
- d. Use safety risk management techniques to reduce the risk of injury to employees and property damage.
- e. Ensure employees under their supervision are well informed and properly trained in safety requirements relating to their work environment and duty positions.
 - f. Ensure that PPE is available, in operational condition, and used when necessary.
- g. Promptly evaluate, and take necessary action to correct, safety hazards and deficiencies reported by employees, and those identified during safety inspections or through accident investigations and analysis.
- h. Ensure all accidents are reported, investigated and analyzed, and that accident prevention measures are implemented.
- i. Ensure that safety standing operating procedures (SOPs) are reviewed at least annually or more often if necessary; that they are properly distributed; and that the procedures within them are actually practiced and enforced. The SOPs will be revised at least every three years. Whenever an SOP is revised, a copy will be forwarded to the Safety Officer, who will review and approve it *before* it is signed and published. In addition to the activity chief's signature on the safety SOP, the SOP must also bear the signature of the Safety Officer. Safety SOPs that are not signed by both the activity chief and the Safety Officer are invalid.
- j. Coordinate all plans for work area rearrangements and modifications that involve construction or engineering, the procurement of equipment or furniture, configuration changes, storage, and similar concerns with the Chief, Facility Management Branch and/or the Safety Officer.
- k. Ensure that all safety requirements are included in purchase requests for all material and equipment that is ordered (for example, chemicals, electrical and non-electrical machinery, furniture, draperies, decorations, and similar items). Contact the Safety Officer for guidance when necessary.
- 1. Ensure that performance standards for officers, NCOs, and civilian supervisors include safety responsibilities as a rating element. The success of these individuals in meeting their safety responsibilities will be considered in performance appraisals.
- n. Ensure the safety representative is given visibility and time to execute safety program duties.

o. Ensure that the Safety Officer is provided the names of all employees enrolled in the Respiratory Protection Program.

2-11. The Chief, Medical Maintenance Branch

The Chief, Medical Maintenance Branch will—

- a. Manage the Medical Equipment Management Plan and Program IAW JCAHO standards.
- b. Ensure that relevant electrical equipment safety requirements are implemented and maintained in accordance with appendix F of this regulation.
- c. Ensure coordination and information exchange is maintained with the Safety Officer and the Safety and Environment of Care Committee concerning all medical equipment issues (for example, malfunctions, user errors, hazard warnings and training) and that corrective actions are promptly taken.

2-12. The Chief, Facility Management Branch

The Chief, Facility Management Branch will—

- a. Manage the Utilities Plan and Program IAW JCAHO standards.
- b. Maintain the buildings and grounds and ensure compliance with required JCAHO standards for utility systems and life (fire) safety equipment management programs for healthcare facilities
- c. Involve the Safety/Infection Control Office, and IH staff in construction activities from planning phase to completion.
- d. Initiate an Infection Control Risk Assessment in the planning stage of construction activities.
- e. Assist the Safety Officer in conducting ILSM risk assessment and ensure ILSMs are initiated, communicated and followed to temporarily compensate for the hazards posed by existing Life Safety Code (LSC) deficiencies and/or construction activities.
- f. Ensure coordination and information exchange is maintained with the Safety Officer and the Safety and Environment of Care Committee concerning all utility systems and life (fire) safety equipment issues that affect the safety and/or health of the facility's occupants. System problems that constitute possible unsafe or unhealthful conditions will be reported to the Safety Officer immediately, with timely follow up status reports.
 - g. Ensure that emergency service areas are clearly identified and easily accessible.
 - h. Provide oversight to the housekeeping contract.

2-13. The Safety Officer

The Safety Officer will—

- a. On behalf of the MEDDAC Commander, plan, develop, and direct the MEDDAC Safety Program IAW JCAHO standards and regulatory agencies.
- b. Investigate all accidents that result in personal injury, occupational disease, or government property damage and recommend appropriate countermeasures to preclude similar recurrences. (AR 385-40). Maintain an accident record system (that is, an accident log).
- c. Provide general safety orientation and birthmonth annual training and, as needed, develop a training outline and briefing slides, based on hazards of the workplace, for safety representatives to follow when conducting area-specific safety training.
 - d. Conduct safety inspections in all patient care areas at least every six months and in non-

patient care areas at least annually, IAW AR 385-10, to identify safety deficiencies, hazards, and unsafe practices. Analyze all identified hazards to determine the degree of risk involved and make appropriate recommendations for abatement of each hazard.

- e. Coordinate Safety and Environment of Care Committee activities. Serve as the point of contact for the collection of information to evaluate and improve conditions in EC; manage the process to collect information about deficiencies and opportunities for improvement in EC management programs and review summaries of deficiencies, problems, failures, and user errors related to the EC programs; report on findings, recommendations, actions taken, and results of measurement to the Safety and Environment of Care Committee; and coordinate with appropriate staff to implement recommendations and monitor their effectiveness.
- f. Manage the Life Safety/Fire Prevention Plan and program in partnership with Facility Management Branch and the Installation Fire Department IAW JCAHO standards and regulatory agencies; serve as fire marshal for building 2480; maintain and implement the Life Safety/Fire Prevention Plan.
- g. Direct the Hazard Communication (HAZCOM) and Respiratory Protection Programs, interfacing with PM.
- h. Assist in the development of safety SOPs and ensure that the SOPs are reviewed by the Safety Officer at least every three years.
- i. Investigate submissions of DA Form 4755 (Employee Report of Alleged Unsafe or Unhealthful Working Conditions) involving MEDDAC, DENTAC and VS personnel, operations, equipment, procedures, and/or facilities to determine the degree of risk involved and make appropriate recommendations for abatement.
- j. Determine the need to procure and distribute safety and occupational health promotional and educational materials within the command.
- k. When applicable, investigate and report violations of Occupational Safety and Health Act (OSHA) standards on DA Form 4754 (Violations Log) or equivalent. DA Form 4753 (Notice of Unsafe or Unhealthful Working Condition) will be used to post notices of OSHA violations. (AR 385-10.)
- 1. Ensure the Commander, U.S. Army Medical Command, ATTN: MCSM, is immediately notified of any inspection visits by representatives of the Department of Labor.
- m. Assist the Chief, Facilities Management Branch in conducting infection control and ILSM risk assessments.

2-14. The Alternate Safety Officer

The Alternate Safety Officer will assist the Safety Officer in executing the MEDDAC Safety Program and will function as the Safety Officer when the incumbent cannot perform his or her duties (during periods of leave, illness, TDY and other absences).

2-15. The Laboratory Safety Officer

The KACC Laboratory Safety Officer will—

- a. Be appointed in writing as the Laboratory Safety Officer.
- b. Develop, implement and enforce the Laboratory Safety Program in compliance with the College of American Pathologist standards and this regulation.
 - c. Ensure the development and implementation of a chemical hygiene plan for the laboratory.

2-16. Safety representatives

Safety representatives will—

- a. Be appointed in writing as Fire, Safety and HAZCOM Representative.
- b. Be familiar with this and other pertinent safety regulations to educate and motivate safe performance of subordinates both on and off duty, and enforce the safety requirements.
- c. Use safety risk management techniques to reduce the risk injury to patients, visitors and employees, and also to reduce property damage.
- d. Conduct monthly inspections of duty locations to identify, correct and avoid and/or eliminate unsafe acts or conditions. Correct and report unsafe and unhealthful working conditions. Document results on MEDDAC Form 7. Original report will be forwarded to the Safety Officer with a copy filed.
- e. Facilitate area-specific safety and HAZCOM training, as appropriate. Ensure all employees are aware of and understand their responsibilities. This training will be conducted upon initial assignment and annually thereafter.
- f. Develop a safety SOP for the activity, if applicable. Review the SOP annually and revise it as necessary but not less than every 3 years.
- g. Maintain a safety program binder. Implement new policies and procedures as they are published.
- h. Ensure that safety reminders, posters, booklets and brochures are provided for employees. Safety bulletin boards should have at a minimum the following information posted on them:
 - (1) Safety Policy and Reporting Unsafe/Unhealthful Working Conditions memorandums.
 - (2) Fire Reaction Plan.
 - (3) DD Form 2272 (DOD Occupational Safety and Health Protection Program).
 - (4) Blank copies of DA Form 4755. (May be kept in the Safety Program Binder.)
 - (5) Safety grams, safety awareness posters, etc.
 - i. Identify personnel who need PPE and provide it to them.
 - j. Update the Chemical Inventory annually and furnish a copy to the Safety Officer.
 - k. Report accidents, illnesses and unusual occurrences to the Safety Officer.

2-17. All MEDDAC, DENTAC and VS personnel

All MEDDAC/DENTAC/VS personnel will—

- a. Read and comply with all applicable safety and occupational health standards, regulations, policies, and procedures. Use and maintain PPE provided.
- b. Use safety risk management processes to reduce the risk of injury to patients, visitors and employees, and also to reduce property damage.
- c. Immediately report all unsafe or unhealthful acts or working conditions to their supervisors and/or the Safety Officer.
- d. Immediately report all occupational accidents, and near misses of occupational accidents, regardless of how minor to the supervisor or other individual in charge, if such accidents involve an injury and/or property damage or the potential for occupational disease.

Chapter 3

Elements of the Safety Program, and Policy

3-1. Elements of the safety program

The following elements constitute the safety and occupational health program for the MEDDAC, DENTAC and VS.

- a. An occupational health program of pre-employment and annual medical record surveillance, emergency medical treatment, fitness for duty and follow up physical examinations and tests as necessary.
- b. A Safety and Environment of Care Committee and participation in local and federal safety activities.
- c. A comprehensive and active training program that includes orientation of new employees and periodic refresher training in safe working practices for all employees.
- d. A continuous and comprehensive inspection program to ensure that all building, areas, operations, etc., are free from unsafe conditions and practices.
- e. An abatement program to provide for systematic, time-phased correction of safety deficiencies. This includes development and maintenance of a log of deficiencies and an abatement plan to implement correction of noted deficiencies.
 - f. Prompt investigation of accidents and injuries.
- g. Standards for facilities and equipment that meet or exceed safety and health standards established by federal, state, and local statutes and regulations and Army regulations.
- h. A system to identify, mark and handle chemical substances used within the MEDDAC, DENTAC and VC.
- i. Preparation and prompt submission of all required reports and computation and retention of statistical information on local accident trends.
- j. Conservation of manpower through reduction of off-duty accidents. This includes home safety and operation of privately owned vehicles.

3-2. Special subject areas

The special subject areas within the command's safety program are contained in the following appendixes:

- a. Appendix B: Accident Prevention Guidelines
- b. Appendix C: Accident Reporting, Investigation, and Analysis
- c. Appendix D: Safety Awards Program
- d. Appendix E: Construction and Renovation Safety
- e. Appendix F: Electrical and Electronic Equipment Safety
- f. Appendix G: Inspections, Hazard Surveillance, and Hazard Reporting
- g. Appendix H: Standard for Medical Gases and Liquids
- h. Appendix I: Personal Protective Equipment (PPE) Program
- i. Appendix J: Prevention of Motor Vehicle Accidents
- j. Appendix K: Respiratory Protection Program
- k. Appendix L: Safety Training Program
- 1. Appendix M: Hearing Conservation Program
- m. Appendix N: Latex Safety Policy
- o. Appendix O: Space Heater Policy

3-3. Policy

- a. *Risk management*. Accident risk management process will be exercised by decision makers. Decision makers at all levels will utilize the risk management process, as specified in AR 385-10, to avoid unnecessary residual risk to missions, personnel, equipment, and the environment.
- b. *Hazard abatement*. Lack of awareness or noncompliance with mandated standards, workplace deficiencies, hazards and accident causes will be expeditiously corrected.
- c. *Acquisition of materials and equipment*. Purchase requests for all materials and equipment (chemicals, electrical and non-electrical machinery, furniture, draperies, and decorations) must be channeled through the Chief, LOG to ensure that safety requirements are met.
- d. *Chemical safety*. Safety will be considered in the acquisition, use and disposal of chemicals and hazardous materials.
- e. *Space utilization*. Changes in work area design will be channeled through the Chief, Facility Management Branch (such as for moving storage from one room to another or installation of modular furniture).
- f. *Parking violations*. Parking in "no parking" areas will be subject to ticketing by the Provost Marshal. This includes parking marked fire lanes, in front of fire extinguishers, by the bulk oxygen, and similarly restricted areas.
- g. *Performance standards*. Performance standards for military and civilian managers and supervisors will include accident prevention and occupational health responsibilities as a rating element.

Appendix A References

Section I

Required Publications

AR 385-10

The Army Safety Program. (Cited in para 3-2.)

DA Pam 40-501

Hearing Conservation Program. (Cited in appendix B.)

DA Pam 40-503

Industrial Hygiene Program. (Cited in appendix B.)

Mil Specs Handbook 1191. (Cited in appendix O.)

USACHPPM TG 167A

Hearing Evaluation Automated Registry System (HEARS) Audiometer Operation Manual. (Cited

in appendix B.)

USACHPPM TG 181

Noise Dosimetry and Risk Assessment. (Cited in appendix B.)

Section II

Related Publications

A related publication is merely a source of ad

ditional information. The user does not have to read it to understand this regulation.

AR 40-5

Preventive Medicine

AR 190-5

Motor Vehicle Traffic Supervision

AR 385-32

Personal Protective Equipment

AR 385-40

Accident Reporting and Records

AR 385-55

Prevention of Motor Vehicle Accidents

AR 420-90

Fire Protection

AR 672-74

Army Accident Prevention Awards Program

DA Pam 40-501

Hearing Conservation Program **EO 12196**

PL 91-596

Occupational Safety and Health Act

WRAMC Reg 385-6

Medical Electrical/Electronic Safety

29 Code of Federal Regulations (CFR) 1910

29 CFR 1960

Section III

Prescribed Forms

MEDDAC Form 7

Monthly Hazard Surveillance/Fire Inspection Checklist. (Prescribed in paras 2-10 and 2-16.)

MEDDAC Form 714-R

Injury Report. (Prescribed in appendix C.)

MEDDAC Form 763

Application for Space-heating Device. (Prescribed in appendix O.)

Section IV

Referenced Forms

DA Form 3953

Purchase Request and Commitment

DA Form 4753

Notice of Unsafe or Unhealthful Working Conditions

DA Form 4754

Violation Inventory Log

DA Form 4755

Employee Report of Unsafe or Unhealthful Working Conditions

DA Poster 40-501A

Occupational Noise Exposure Standard and Hearing Conservation Amendment

DD Form 2214

Noise Survey

DD Form 2214C

Noise Survey Continuation Sheet

DD Form 2272

DOD Occupational Safety and Health Protection Program

MEDDAC OP 387

Occupational Health Latex & Rubber Hypersensitivity Screening Questionnaire

Appendix B Accident Prevention Guidelines

B-1. Purpose

To identify and evaluate actual and potential workplace hazards. All accidents can be prevented. The following reasons are cited for accidental occurrences: indifference or insufficient safety awareness, inadequate training or experience, inattention due to poor work habits or fatigue, and improper use of equipment. The accident risk management process is out-lined in AR 385-10.

B-2. Safety Precautions

Although not all inclusive, adherence to the safety precautions listed herein will eliminate many of the hazards found in the workplace.

- a. Corridors. (Also see MEDDAC Reg 420-1.)
 - (1) Corridors will be kept well lit and free of hazards and obstructions.
- (2) Furnishings, equipment, and storage will not be allowed to accumulate within the corridors.
 - (3) Combustibles will be limited. This includes decorations and items on bulletin boards.
 - (4) Door wedges (door stops) are prohibited on all doors. There are no exceptions.
 - b. *Electrical and electronic equipment*. (See appendix F.)
 - c. Emergency eye washes and showers.
 - (1) Eye washes will be installed wherever there is a chemical hazard to the eyes.
- (2) Portable eye washes will not be used in any MEDDAC, DENTAC or VS facilities unless running water is not available. All emergency eye washes will be permanently plumbed and capable of delivering potable water for at least fifteen minutes.
- (3) All eye washes will be test-flushed weekly for a minimum of three minutes. Documentation records will be kept and maintained for a minimum of one year.
- (4) Water to eye washes will be from cold water sources only or supplied through a mixing valve that limits the water temperature at the eye cups.
 - d. Floors.
- (1) Floors will be kept clean, dry and free of clutter. Spills will be promptly cleaned up and the area protected until the clean-up is completed.
- (2) Trip hazards, such as lose or lifting floor coverings or holes in floors, will be protected and repaired or removed.
 - e. Furniture. Furniture will—
- (1) Be suitable for the area in which it is used, and will be maintained in a serviceable condition and checked frequently to ensure it is free from hazards. Remove from service if any defects are identified.
 - (2) Not have openings larger than six inches when used in pediatric areas.
 - f. Grab bars and rails. Grab bars and rails will—
 - (1) Be installed in all patient toilet and bathing areas.
- (2) Be properly installed and secure. To the extent possible, will be installed IAW handicapped provisions and specifications.
 - g. Gurneys. Gurneys will—
 - (1) Be properly maintained.

- (2) Be equipped with operable side rails.
- (3) Will be equipped with operable wheel locks or brakes.
- h. Hearing Protection. See appendix M.
- i. Housekeeping.
- (1) Floor maintenance will be performed only on one-half of the corridor at any one time. The other side will be kept dry and clear for traffic.
- (2) Whenever floors are wet, the Housekeeper will place warning signs at the beginning and end of the wet area. As soon as an area has dried, the signs will be removed.
- (3) The amount of water or liquid on a floor surface will be kept to a minimum. Flooding of the floor surface for cleaning will not be allowed except in specified areas at specified times, and only when necessary.
- (4) Housekeeping carts will not obstruct access to emergency or patient care equipment. They will not be stored in the corridors, but rather in the housekeeping closets.
- (5) Housekeepers will wear protective clothing and equipment as needed for their duties. They will follow all universal precautions.
 - m. Lighting.
 - (1) All lights and light fixtures will be maintained and kept in proper working condition.
- (2) The manufacturer's maximum wattage recommendations will be followed on all light fixtures.
- (3) Light fixtures will not be covered or draped with combustible materials. Only approved shades, globes, covers and diffusers will be used.
 - n. *Motor vehicles*. (See appendix J.)
 - o. Patient call systems. Patient call systems will—
 - (1) Be installed in each Same Day Surgery (SDS) patient toilet and bathing location.
 - (2) Provide an audible and visual signal.
 - (3) Be maintained in an operable condition.
 - p. Patient care. Specific SDS falls prevention is addressed in the departmental SOP.
 - q. Patient rooms and treatment rooms.
- (1) Patient rooms and treatment rooms will be kept clear of unnecessary clutter and trip, slip and fall hazards.
 - (2) All equipment and utilities will be maintained in good operating condition.
- (3) Door locks on toilets and rooms where patients may be left unattended will be of a type that may be released from the outside by use of a pen or other simple object. These doors will not require a key to open. The staff will be trained on how to release and open these doors.
 - r. *PPE*. (See appendix I.)
 - s. *Sharps*. (Also see MEDDAC Reg 40-19, Bloodborne Pathogens Exposure Control Plan.)
- (1) Sharps will not be recapped (except as stated below), bent, cut or otherwise manipulated prior to disposal. Where recapping is absolutely necessary for aseptic or other reason, a cap holder, recapping shield or one-handed scoop method will be used. (MEDDAC/DENTAC Reg 40-19.)
- (2) Sharps will be disposed of in approved sharps containers, following prescribed procedures. (See MEDDAC/DENTAC/VS Reg 40-14, Regulated Medical Waste Management Program.)
- (3) Only approved containers will be used for sharps disposal. Container approval is through the Safety and Environment of Care Committee and the Infection Committee.

- (4) To the extent possible, sharps disposal containers will be conveniently located at the use site.
- (5) Safety devices that are authorized by the North Atlantic Regional Medical Command (NARMC) Standardization Committee will be used to prevent sharps injuries.
 - t. Wheelchairs.
- (1) Employees will back wheelchairs over gaps, curbs, or other surfaces which may result in the wheelchairs being tipped.
 - (2) Employees will be trained in proper use and movement of patients in wheelchairs.
- (3) Patients will not be allowed to step on the foot rest when entering or exiting a wheel-chair
 - (4) Wheelchairs will—
 - (a) Be checked regularly for condition and safety.
 - (b) Be equipped with two operable wheel brakes or locks.
 - (c) Accessories will be properly attached (not taped, wired, or tied).

Appendix C Accident Reporting, Investigation, and Analysis

C-1. Purpose

To establish policies and procedures and assign responsibilities for reporting, investigating, and analyzing accidents and incidents. The primary purpose of investigating and reporting Army accidents is prevention.

C-2. References

- a. AR 190-40, Serious Incident Report, with MEDCOM Supplement 1.
- b. AR 385-40, Accident Reporting and Records.
- c. DA Pam 385-40, Accident Investigation and Reporting.

C-3. Responsibilities

- a. Supervisors and NCOs will ensure that—
 - (1) All injuries are reported to the Safety Office and Risk Manager.
- (2) DA Form 4106 (Report of Unusual Occurrence, Patient Incident Report) is required for all injuries and will be forwarded to the RM within 24 hours or the next business day.
- (3) All accidents will be investigated to obtain the facts and circumstances and ensure the proper reports have been prepared, IAW the references C-2a and b, above, and the following paragraph C-3e, below.
- b. The Safety Officer will provide support for accident investigations and report preparation as required; maintain a log of occupational injuries and illnesses and an accident reports file; and review and analyze accident reports to identify trends and problems, and recommend accident prevention.
- c. The Administrative Officer of the Day will notify the MEDDAC Commander, Post Staff Duty Officer, Chief, MEDDAC Military Personnel Division, Senior Medical NCO, Medical Company First Sergeant, and Safety Officer after normal duty hours of all catastrophic or fatal

accidents (class A and B accidents).

- d. The staffs of the Family Care Center and Occupational Health Clinic (OHC) will ensure a MEDDAC Form 714-R (Injury Report) is initiated on all injuries seen by a healthcare provider upon presenting to the primary care manager (PCM) or OHC following an accident. A copy of MEDDAC Form 714-R is in the R-Forms section at the back of this regulation. The form is also available on the MEDDAC's web site. All injury reports concerning General Schedule civilians will be forwarded to the Occupational Health Nurse (OHN), who will furnish a copy to the Safety Officer. All other injury reports will be forwarded directly to the Safety Officer.
 - e. Injury forms requirements. See tables C-1 and C-2 below.

Table C-1
Military personnel - forms to be used in conjunction with injuries and occupational illnesses

Duty status	Circumstances	MEDDAC Form 714-R	DA Form 285	DA Form 285-AB-R	DA Form 7306-R ¹
	No Lost-time case	Х			
On-duty	Lost-time case	Х		Х	
	Fatality, Permanent Total or Permanent Partial	Х	х		Х
	No Lost-time case	Х			
Off-duty injuries	Lost-time or Greater Non-fatal Injury	Х		Х	
	Fatality, Permanent Total or Permanent Partial	Х		Х	Х

¹ The Safety Officer or chain of command will complete this form and immediately (within 24 hours) notify the Army Safety Center by telephone to (205) 255-2660/2539/3410 (DSN 558); and the OSHA Region III Norfolk Area Office (if an on-the-job fatality) to (757) 441-3820.

Table C-2
Civilian personnel - forms to be used in conjunction with on-duty injuries and occupational illnesses ¹

Reason	MEDDAC Form 714-R	MEDDAC OP 508	CA-1 ²	CA-2 ³	CA-6 ⁴	CA-16 ⁵	CA-17 ⁶	DA Form 7306-R ⁷
Traumatic injury	Х	Х	Х			Х	Х	
Occupational Illness	Х			Х		Х	Х	
Fatality	Х				Х	Х		Х

¹ See para C-4h(2), below, for an explanation of each form listed in this table.

- f. All Department of the Army military and civilian employees will—
- (1) Immediately report a job-related injury to his or her first-line supervisor and complete the appropriate injury report(s) upon presenting to the PCM or OHC following an accident.
- (2) Initiate appropriate forms and notification as indicated in tables C-1 and C-2. Forms will be turned in to the supervisor as soon as possible, but not later than three days (72 hours) following the injury or illness.
- g. Contract employees will report injuries to the first-line supervisor, the contract office representative, and the Safety Officer. Injuries will be recorded on DA Form 4106 and MEDDAC Form 714-R. Forward DA Form 4106 to the RM and the MEDDAC Form 714-R to the Safety Office.

² DOL Form CA-1: Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation.

³ DOL Form CA-2: Notice of Occupational Disease and Claim for Compensation.

⁴ DOL Form CA-6: Official Superior's Report of Employees Death.

⁵ DOL Form CA-16: Authorization for Examination and or Treatment.

⁶ DOL Form CA-17: Duty Status Report.

⁷ The Safety Officer or chain of command will complete this form and immediately (within 24 hours) notify the Army Safety Center by telephone to (205) 255-2660/2539/3410 (DSN 558); and the OSHA Region III Norfolk Area Office (if an on-the-job fatality) to (757) 441-3820.

h. Patient, visitor and student injuries will be reported to the supervisor and the Safety Officer. Both DA Form 4106 and MEDDAC Form 714-R will be completed. Forward the DA Form 4106 to the RM and the MEDDAC Form 714-R to the Safety Office.

C-4. Policy

- a. Contract employees, visitors, students and volunteers may be seen by a MEDDAC health care provider for the initial visit following an injury. As appropriate, contract employee should contact their CORs for approval since the contracting agency will be charged for the medical care by the Uniform Business Office.
- b. All injuries will be reported to the Safety Officer as soon as possible, preferably the day of the injury but no later than 72 hours following the time of the injury. Prior to submission of MEDDAC Form 714-R, verbal or telephonic notification to the Safety Office is recommended for risk management purposes.
- c. Safeguarding accident information. Accident investigation reports are official documents that contain limited use information. In accordance with AR 385-40, accident investigation reports will be used solely for accident prevention purposes. Accident reports and the privileged documents contained therein may not be used as evidence or to get evidence in any disciplinary, administrative, or legal action.
- d. Release of information from accident investigation reports. All requests under the provisions of the Freedom of Information Act for information from or copies of limited use accident investigation reports or general use reports will be referred to the Commander, U. S. Army Safety Center (USASC), ATTN: CSSC-ZJA, Fort Rucker, AL 36362-5363.
- e. Accident and incident classes. Accident classes are used to determine the appropriate investigative and reporting procedures. (See table C-3 below.)

Table C-3
Accident and incident classes

Class	Extent of property damage	Recordable injury or occupational illness
* A	\$1,000,000.00 or more	Fatality or permanent total disability
* B	\$200,000 to \$999,999.99	Permanent partial disability and/or 3 or more people hospitalized as inpatients as the result of a single occurrence
С		Non-fatal injury resulting in loss of time from work beyond day/shift when injury occurred
	\$20,000 to \$199,999.99	Non-fatal illness that causes loss of time from work, or a disability at any time
D	\$2,000 to \$19,999.99	

¹ The Safety Officer or chain of command will complete this form and immediately (within 24 hours) notify the Army Safety Center by telephone to (205) 255-2660/2539/3410 (DSN 558); and the OSHA Region III Norfolk Area Office (if an on-the-job fatality) to (757) 441-3820.

- f. What to Report. All accidents will be reported to the Safety Officer that involve—
- (1) Personal mishap, injury or death to on-duty and off-duty military personnel, on-duty civilian employees, or on-duty contractor or housekeeping employees.
- (2) Personal mishap or injury to patients, visitors or others while in MEDDAC, DENTAC or VS facilities (including grounds) or when injured in accidents involving MEDDAC, DENTAC or VS operations.
 - (3) Occupational illnesses involving on-duty military, civilian or contract personnel.

- (4) Property damage to MEDDAC, DENTAC and VS facilities or equipment.
- (5) Fires involving MEDDAC, DENTAC and VS facilities or equipment.
- (6) Army motor vehicle accidents occurring on or off post.
- (7) Privately owned vehicle (POV) accidents involving on-duty and off-duty military personnel or on-duty civilian employees. Accidents involving civilians will be reported when a POV is being used for official business or when the accident occurs on government property.
- g. Reporting of accidents to the Safety Officer will be accomplished as follows to ensure that prompt and effective investigation, analysis, and corrective action and accident prevention measures are implemented:
- (1) During normal duty hours, occupational accidents and illnesses, regardless of severity will be reported to the Safety Officer by the area supervisor, immediately after the accident, same day of occurrence. This includes mishaps involving patients, visitors, staff members and contract personnel.
- (2) During other than normal duty hours (nights, weekends and holidays) on-duty occupational accidents will be reported the following normal duty day unless otherwise directed.
- (3) Catastrophic accidents (accidents resulting in a fatality, permanent disability, hospitalization of three or more personnel in a single occurrence, or major property damage regardless of when they occur) will be reported immediately to the Safety Officer, the DCA, and the MEDDAC Commander.
- (4) Except for catastrophic accidents (see paragraph (3)), whenever a supervisor is notified that a staff member has been injured and or hospitalized as a result of an off-duty accident, he or she will notify the Safety Officer the next working day.

h. Forms.

- (1) *MEDDAC Form 714-R*. This form will be completed for all on-the-job injuries and occupational illnesses.
- (a) For military and civilian injuries, this form will accompany the injured member, when possible, to the OHC or health care provider where treatment is sought and will be completed and forwarded by the medical staff to the OHC for review and distribution.
- (b) Contract employees, volunteers and students will complete this form and forward it to the Safety Officer for review within 72 hours following the injury. Supervisors will initiate MEDDAC Form 714-R for patients and visitors and send completed form to Safety Officer for review.
- (2) U.S. Department of Labor (DOL) forms. The following forms, as appropriate, will be completed by the supervisor and injured civilian staff member, or their appointed representative, and forwarded through their supervisor to the Occupational Health Nurse (civilian) with a copy to the Safety Officer not later than three days following the accident occurrence.
- (a) DOL Form CA-1 (Federal Employees' Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation). Use for all civilian on-duty or on government property injuries.
- (b) DOL Form CA-2 (Notice of Occupational Disease and Claim for Compensation). Use for all civilian occupational illnesses. This includes strains that occur over a period of time where a singular, traumatic incident cannot be sited.
- (c) DOL Form CA-16 (Authorization for Examination and or Treatment). This form is generated by the OHC. Use if the employee elects to be treated by a physician of his or her own choice following the evaluation at the OHC. The MEDDAC's "clinic first policy" highly encourages treatment within the military healthcare system.

- (d) DOL Form CA-17 (Duty Status Report). Use to specify usual work requirements of the employee.
- (3) Department of the Army (DA) forms. Use DA Form 285 (U.S. Army Accident Investigation Report) or DA Form 285-AB-R (Abbreviated Ground Accident Report), as appropriate. (See table C-1, page 14.) Form will be completed by the immediate supervisor for all recordable accidents involving active duty personnel for accidents involving lost time past the day of injury. The supervisor will route the form through the department, division or service chief to the Safety Officer no later than seven days after the mishap. The Safety Officer will complete the routing through headquarters and distribute the final report as required.
- (4) DA Form 4106 (Report of Unusual Occurrence). This form will be completed to report all injuries, including those experienced by patients, visitors, contract workers, and volunteers. All incidents will be reviewed by the Risk Manager and the Safety Officer. Information contained in these reports will be used for investigating and reporting accidents.
- (5) DA Form 7306-R (Worksheet for Telephonic Notification of Ground Accident). This form will be completed for all class A and B accidents.
- i. Notification of class A and B (catastrophic) accidents. The Safety Officer will ensure required notifications are accomplished in accordance with references.

Appendix D The Safety Awards Program

D-1. Purpose

To establish an awards program that will recognize and reward individuals and organizational elements for noteworthy contributions to accident prevention. The various awards and their criteria are listed below. All certificates for these awards will be prepared by the MEDDAC Safety Officer.

D-2. References

- a. AR 385-10, The Army Safety Program.
- b. AR 672-74, Army Accident Prevention Awards Program.

D-3. General

- a. Outstanding efforts and achievements in the prevention of accidents will be recognized. Supervisors will take cognizance of their subordinate activities and individuals when significant contributions are made to the efficiency, economy and improvement of operations through accident prevention.
- b. Safety awards are authorized for individuals, departments, divisions and services on the basis of their total safety record. Recommendations for safety awards may be initiated by the Safety and Environment of Care Committee, supervisors or the Safety Officer for those individuals or activities who demonstrate outstanding effort and achievement in the prevention of accidents, in accordance with the award criteria established by AR 672-74.

D-4. Safety Awards

Following are the types of safety awards that may be presented to MEDDAC personnel. They will

be presented in suitable ceremonies.

- a. *The Certificate of Merit for Safety*. The Certificate of Merit for Safety (DA Form 1118) may be presented to departments, divisions and major services, and to any segment of their organizations that may qualify, upon completion of a minimum of one year of outstanding achievement in accident prevention. The chief of the department, division or major service, or an outlying clinic's commander, director, or officer in charge may initiate a recommendation for this award by submitting a memorandum to the MEDDAC Safety Officer, furnishing the necessary information IAW AR 672-74.
- b. The Certificate of Achievement in Safety. Certificate of Achievement in Safety (DA Form 1119) may be presented upon completion of one year of accident-free experience to unit commanders, civilian or military supervisors, military or civilian army motor vehicle operators, operators of mechanical equipment, and other deserving personnel who meet the criteria specified by AR 385-10. Recommendations for this award may be submitted to the MEDDAC Safety Officer by any individual in a supervisory position that is superior and in the chain of command of the intended recipient.
- c. Special safety incentive awards. Special incentive awards for safety, including monetary awards, are permitted through the incentive awards program. A nomination for a special safety incentive award will include a written narrative justification describing the specific contribution(s) the nominee made to the Safety Program. Nominations will be forwarded through the Safety Officer. Significant contributions in accident prevention include but are not limited to the following:
- (1) Identifying and reporting, or coordinating, correction for an unsafe act or an unsafe condition that could have resulted in injury and or property damage. Proactive measures to resolve unsafe conditions in the workplace.
- (2) Initiating procedural or work operations changes that reduce or eliminate an existing hazard exposure potential to patients, staff, or visitors (for example, substitution of less hazardous or non-hazardous materials or chemicals that perform virtually the same mission function, and incorporation of additional or more stringent administrative, engineering, or environmental controls).
- (3) Assisting in various aspects of the safety program, in addition to an individual's normal duty responsibilities (for example, preparing safety education packages for training or distribution, and preparing or revising safety SOPs).

Appendix E Construction and Renovation Safety

E-1. Purpose

To establish policies and procedures for construction and renovation safety. It is important that construction areas within and around the health care facility be safe for the health care community as well as for the construction workers.

E-2. References

- a. Joint Commission Accreditation Manual for Ambulatory Care.
- b. MEDDAC/DENTAC/VS Reg 40-14, Regulated Medical Waste Management Program.

- c. MEDDAC/DENTAC/VS Reg 385-2, Hazard Communication (HAZCOM) Program.
- d. MEDDAC/DENTAC/VS Reg 420-2, Fire Prevention and Protection.
- e. National Fire and Protection Agency (NFPA) 101, NFPA 99, Life Safety Codes
- f. Relevant state, county and municipality safety and health standards, laws and regulations.

E-3. Responsibilities

- a. *The Chief, LOG.* The Chief, LOG will chair construction meetings and ensure ILSMs are developed. The chief may delegate this duty to the Chief, Facility Management Branch.
- b. *The Safety Officer and Industrial Hygienist*. The Safety Officer and Industrial Hygien-ist will—
- (1) Attend construction meetings to review contractor work operation plans and requirement documents prior to new or renewal contractor operations.
- (2) In coordination with the Installation Fire Department, develop ILSMs to be implemented by the Safety Office and Facility Management Branch.
 - c. The Chief, Facility Management Branch. The Chief, Facility Management Branch will—
 - (1) Maintain the buildings and grounds.
- (2) Assist the Safety Officer to develop and implement ILSMs, and ensure they are complied with.
 - (3) Initiate infection control risk assessments.
- (4) Chair constructions meetings when directed to do so by the Chief, LOG or in the absence of the Chief, LOG.
 - e. Contractors. Contractors will—
 - (1) Establish an effective safety program.
- (2) Ensure that each contract employee is trained in work practices necessary to safely perform his or her job and document that each employee has received and understood the training received.
- (3) Advise the contracting officer representative (COR) of any unique hazards presented by the contractor's work or of any hazards discovered by the contractor's work.
- (4) Provide a copy of the material safety data sheets (MSDS), or make it available at a central location in the workplace, for each hazardous chemical used in the construction. Inform the COR of any precautionary measures necessary to protect employees during construction.
 - (5) Ensure a lockout or tagout program is established to control energy sources.
- (6) Obtain a hot work permit from the Installation Fire Department whenever welding, cutting, soldering or brazing must be done.
 - (7) Ensure that contract workers are identified by identification badges.
- e. *Contractor supervisors and CORs*. Contractor supervisors and CORs will ensure that all contractor operations within and around MEDDAC, DENTAC and VS facilities are in compliance with the references listed above in paragraph E-2 above.
- (1) Contract documents will clearly state that the contractor meets specific safety, health and equipment requirements and ILSMs, including provisions for protecting his company's employees and the public from construction hazards.
- (2) A pre-construction conference will be held with the Chief, LOG, Chief, Facility Management Branch, Safety and Infection Control Officer, Industrial Hygienist and the contractor. Ways of access for employees, construction materials, and equipment delivery; storage space; and parking areas will be established.

E-4. ILSMs

- a. ILSMs are a series of 11 administrative actions required to temporarily compensate for significant hazards posed by existing National Fire Protection Association 101 and 99 Life Safety Code deficiencies or construction activities. ILSMs apply to all personnel, including construction workers. Implementation of ILSMs will begin upon project development and be continuously enforced through completion of any construction project.
- b. ILSMs are triggered whenever one or more of the following construction activities or deficiencies occur:
- (1) The integrity of the exit access, exit, or exit discharge features is altered or compromised.
- (2) The integrity of the building's "defend in place" fire or smoke compartmentalization features is compromised.
 - (3) The building's fire alarm, detection, or fire suppression system is impaired.
 - (4) Temporary sources of ignition "hot work" (cutting, welding, soldering or brazing).
- (5) Large quantities of combustible material and debris, depending on the magnitude of the project, are present.
- c. Whenever an approved fire alarm or automatic sprinkler system is out of service for more than 4 hours in a 24-hour period in an occupied building, the fire department will be notified and a fire watch established.
- d. Although ILSM items have usual applicability, each ILSM will be considered and or examined on a case by case basis and implemented accordingly. ILSMs consist of the following:
- (1) Ensuring free and unobstructed exits. Affected personnel will receive additional training when alternative exits are designated. Buildings or areas under construction will maintain escape routes for construction workers at all times. Means of exiting construction areas will be inspected daily by the contractor.
- (2) Ensuring free and unobstructed access to emergency services (fire, military police, and other emergency services).
- (3) Ensuring fire alarm, detection, and suppression systems are in good working order. A temporary but equivalent system will be provided when any fire system is impaired. Temporary systems will be inspected and tested monthly.
- (4) Ensuring temporary construction partitions are smoke-tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire
 - (5) Providing additional fire fighting equipment and training personnel in its use.
- (6) Prohibiting smoking according to EC.5 of reference E2a, and in and adjacent to construction areas.
- (7) Developing and enforcing storage, housekeeping, and debris removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level.
 - (8) Conducting a minimum of two fire drills per shift per quarter in the affected areas.
- (9) Increasing hazard surveillance of buildings, grounds and equipment, with special attention to excavations, construction areas, construction storage and field offices.
- (10) Training personnel to compensate for impaired structural or compartmentalization features of fire safety.
- (11) Conducting organization-wide safety education programs to promote awareness of Life Safety Code deficiencies, construction hazards and ILSM.

E-5. Construction guidelines

- a. *Policy*. Contractors will meet with the Facility Manager and Safety Officer to discuss safe operating practices during construction or maintenance projects.
- b. Purpose. Contractors will be required to comply with paragraphs c through f below to ensure that safe construction or maintenance practices are observed at all times.

c. Procedure.

- (1) The contractor will report to Facility Management Branch, which is responsible for the construction or maintenance project on a daily basis.
- (2) Fire and security procedures will be discussed on a daily basis, depending on the type of work and the area in which the work takes place.
- (a) If construction conditions are deemed to interfere with the fire alarm system, the affected smoke detector zone will be programmed out of service before any construction takes place; Facility Management Branch will notify the Installation Fire Department; and the contractor and Facility Maintenance (BMAR) will ensure that the fire alarm is programmed out- of-service before construction and programmed back into service at the end of construction activity for any work day.
- (b) Smoke detectors in construction area are to be protected from dust, dirt and any other construction debris.
- (c) Sprinkler heads located in the construction area will be protected from dust, dirt and construction debris. To preclude the accidental discharge of water from sprinkler heads, particular care will be given during demolition so that no foreign objects come in contact with them.
- (3) Any time welding, cutting, soldering or brazing is to be done, a hot work permit will be obtained from the Installation Fire Department. Permits may be issued for more than one day up to a maximum of 30 days during construction projects.
- (a) The fire alarm system in the affected area will be programmed out during the welding, cutting, soldering or brazing.
- (b) A fire watch will be posted for a minimum of 30 minutes after the work is completed.
- (c) The fire alarm system will be put back into service at the end of the minimum 30-minute fire watch.
- (4) During a construction project, any time the path of egress through an exit corridor, hallway or stairwell is altered, the Safety Officer and Facility Manager will first be consulted to ensure that all paths of egress are still usable for the occupancy in the area under construction.
- (a) The Safety Officer, Facility Manager and Installation Fire Department will be in agreement on any alteration of the exit path of egress before construction begins.
- (b) Alternate exit paths of egress, fire extinguishers, fire alarms, and exit signs will be provided depending on the type of construction project.
- (5) The Facility Manager will provide a path of travel plan for the contractor during construction projects.
 - (a) The contractor will use the path of travel for entering and leaving on a daily basis.
- (b) The contractor is to use the path of travel for removal of demolition debris from the construction area.
- (c) The contractor will be responsible for informing Facility Management Branch any time utility services need to be interrupted, shut off, etc., during a construction or maintenance project.
 - (d) Facility Management Branch requires a minimum of 48-hours notice before any

utility service is interrupted. This notice is needed to enable Facility Management Branch to notify the activities that will be affected by the interruption or shutdown of utility services.

- (e) After the construction work that affected the utility shutdown is completed, the contractor and Facility Management Branch will work together on restoration of the utility service that had been interrupted or shut off.
- (6) The asbestos removal procedure for outside contractors will be explained to all contractors working on the property.
- (7) All outside contractors performing services are required in their contracts to provide the facility with the following:
 - (a) A list of all hazardous materials that will be used in the construction project.
- (b) The location, at or near the construction site and accessible to the facility's employees during their working hours, of the contractor's MSDS file for all hazardous materials that will be used.
- (8) All contractors are required by the terms of their contracts to comply with all applicable regulations for the safety of patients, staff and visitors.
- (9) The Safety Officer or Facility Manager will provide each contractor with the location of the facility's MSDS file of all hazardous materials in use in the area of construction.
 - d. Preliminary site inspection and construction maintenance.
- (1) All contractors will contact Facility Management Branch for an appointment to meet at the facility to inspect the job site and to discuss the project work. During this meeting, the Chief, Facilities Management Branch and the Safety Officer will discuss safety regulations and requirements along with the means of entry into the facility that the construction contractor's crew will use during the project. Parking requirements will also be discussed at this time.
- (2) All contractors, along with the Facility Manager, are to meet with the supervisor (the officer in charge, civilian supervisor or NCOIC) of the area in which the construction project will take place.
- (3) Discussion of work times, inconveniences that may be encountered, including utility shutdowns, will be discussed with the area supervisor at this time.
- (4) To ensure safe conditions and to eliminate smoke and fire hazards, the medical treatment facility (MTF) will require each contractor to clean up the building site before the end of each work day.
- (5) It is the MEDDAC's policy that a safe working environment will be provided at all times, with emphasis on accident prevention. All MTF staff and construction contractors are required to conduct themselves in a safe manner. Each MTF requires that all work to be undertaken will be performed in a safe manner to eliminate injury to staff, patients and visitors and to prevent property damage. Unsafe conditions will be corrected as quickly as possible. It is every contractor's and MEDDAC employee's responsibility, as well as moral obligation, to do all that is possible to achieve safe job conditions. All contractors will wear hard hats during construction work where damage from overhead objects is possible. All contractors are required to use all necessary personal protective equipment, as required by the job task. The Safety Officer will periodically monitor all contractors to ensure that all safety procedures and precautions outlined in this safety program are adhered to. Failure to comply with the safety program will result in access to MTF being denied to the contractor and the contractor's relationship with the MTF being terminated.
- (6) Contractors will seal all penetrations through walls that are necessary due to the installation of cables, conduit, piping, and similar reasons. The Facility Manager will provide

literature to the contractor concerning suggested sealant materials that meet fire code specifications.

- e. Commencement of the project. The contractor will—
- (1) Proceed to job site with a representative from Facility Management Branch and notify the area supervisor that the project is about to begin.
- (2) On each succeeding day of the project, check in with Facility Management Branch before proceeding to the job site.
- (3) After each day's work, check out with Facility Management Branch to ensure that all fire alarm systems are put back into service before construction area shutdown at the end of the work day.
 - (4) Remove all construction debris from the construction area to reduce the fire load.
 - f. Completion of the construction project.
- (1) A construction meeting will be held with the Chief, LOG, Facility Manager, Safety Officer, Industrial Hygienist and contractor to close out the project.
- (2) A walk-thru of the area will be done to ensure that all utility systems are installed correctly and operating as designed.
 - (3) All construction debris will be removed from the area before occupancy.
- (4) Perform a construction punch list to ensure all defects of construction are noted and a schedule for correction is made

Appendix F

Electrical and Electronic Equipment Safety

F-1. Purpose

To establish policy and procedures for electrical and electronic equipment safety.

F-2. References

- a. HSC (MEDCOM) Regulation 750-1, Maintenance of Medical Equipment.
- b. MEDDAC/DENTAC/VS Reg 420-2, Fire Prevention and Protection.
- c. MEDDAC Reg 600-8-2, Competency-based Orientation (CBO).
- d. NFPA 99, Health Care Facilities.

F-3. Control of patient care equipment and appliances

- a. All patient care equipment used for the diagnosis, treatment, monitoring, and care of patients will be maintained, serviced, tested, and inspected in accordance with (IAW) references F-2a and d, above, and other pertinent requirements. An inventory will be maintained for all such equipment, along with documentation for all maintenance, tests, and inspections performed. The Medical Maintenance Branch will ensure implementation of these requirements.
- b. All personnel will immediately report to their supervisor and risk manager any apparent or suspected electrical shock that occurs to a patient or staff member during the use of electrical equipment. Any suspect equipment will be placed out of service immediately.
- c. The use of personal equipment by patients or on patients by staff is prohibited unless a medical need can be demonstrated and fully justified to the satisfaction of the MEDDAC Safety Officer

- d. The integrity of cords and plugs of the above electrical equipment will be checked by a collateral duty safety representative before it is used. Equipment containing frayed or damaged electric cords and plugs will be prohibited from use and will be removed from the facility.
 - e. Battery operated radios, calculators and electronic games are exempt from this policy.
- f. Under no circumstance will personal electrical equipment be permitted in the immediate area where oxygen is in use unless certified as being safe by Medical Maintenance Branch.

F-4. Electromagnetic interference (EMI) policy

- a. The use of cellular telephones is prohibited and the use of 2-way radios is limited within the patient care areas of the operating suites and Post-anesthesia Care Unit.
- (1) When entering a sensitive patient care area with a cellular telephone, ensure it is turned off and not in the standby mode.
- (2) Within a sensitive patient care areas, a 2-way radio may not be operated within six feet of any computers and medical devices that are in use.
- (3) The staff of Medical Maintenance Branch will ensure vendors are aware of the requirements in paragraphs (1) and (2), above, when they issue the vendors their visitor passes.
- (4) Appropriate signage, stating "Notice Cellular Telephones Prohibited", will be posted outside the affected areas by Logistics Division.
- b. Pagers are not affected by this policy. These are devices that receive signals but do not allow the recipient to reply. The signal strength of such pagers is too weak to present an EMI hazard.
- c. The intent of the above EMI policy is to prevent the use of cellular telephones and 2-way radios by staff members, patients, visitors, contractors and vendors in sensitive patient care areas. It is not the intent to prevent the use of either base stations or radios that communicate with wheeled or air ambulances or the use of 2-way radios in emergency situations. Although such communications present some risk of EMI, the necessity of the communication outweighs the risk.

F-5. Control of non-patient care electrical items

- a. Personally owned electrical items may be used in MEDDAC, DENTAC and VS facilities. It is the owner's responsibility to ensure that damaged electrical items are not brought into the facility; electrical items that are discovered to be damaged or not working properly will be immediately removed from the facility. Safety representatives will visually inspect such items. Electrical items that are personally owned by members of the staff will not be used in patient care areas where they could likely come in contact with patients. All personally owned electrical items will bear an approval by Underwriters Laboratories, Incorporated, or by the Factory Mutual Engineering Division.
- b. All contractor owned housekeeping equipment (such as buffers and vacuum cleaners) will be inventoried and have documented visual inspections and tests performed on them IAW reference F-2a, above, prior to initial use and, minimally, on an annual basis thereafter. The contractor will be responsible for this and for providing documentation to the Safety Officer.
- c. Certain facility owned equipment will be exempt from the requirement of having any specific (documented) visual inspection or test performed, regardless of where it is used. This stipulation does not relieve any individual user of such equipment from the responsibility to use the equipment in a safe manner and take it out of service if a fire, shock or other safety hazard is identified. The following types of equipment and appliances, which do not impose a significant risk to patients, staff or visitors during normal use, are included in the exemption category:

- (1) Computers and typewriters.
- (2) Televisions and radios in clinics and other locations where they are not intended to come into patient contact.
 - (3) Addressograph machines and pencil sharpeners.
 - (4) All kitchen appliances.
 - (5) Clocks and calculators.
- (6) Household kitchen appliances (for example, coffee pots, microwaves and cup warmers).
- (a) Coffee pots and other appliances will not be placed on wooden or flammable surfaces.
- (b) Combustible and flammable items (for example, paper towels and cloth) will never be placed under coffee pots.
- (c) A minimum of 12 inches clear area (free of combustible and flammable materials) must be maintained around all appliances.
 - (d) The use of timers on electric appliances is prohibited.
 - (7) Other appliances as determined by the Safety and Environment of Care Committee.
 - d. All electrical appliances will be turned off when not in use.

F-6. Electrical extension cords and adapters

The use of extension cords within the MEDDAC, DENTAC and VS will be kept to a minimum. They are authorized provided all of the following criteria are met:

- a. Extension cords are only authorized for temporary purposes. A work order will be submitted to Logistics Division to install additional receptacles that will preclude the use of extension cords in the future. The only exception is multi-strip surge protector cords for computers. Personally owned extension cords are not permitted to be used within the MEDDAC, DENTAC and VS facilities.
- b. All extension cords will be constructed of 16 gauge conductor or heavier cord with a three prong grounded plug, and a maximum length of 15 feet. Fusible or circuit breaker-type multi-strip extension cord may have a maximum of six outlets. Two extension cords are allowed per circuit. The total electrical capacity of the equipment being used on an extension cord will not exceed the rating of the circuit breaker. Connecting extension cords together to make a longer extension is prohibited.
 - c. Three-to-two prong adapters are prohibited.
- d. All working areas, regardless of purpose, will be arranged to maximize the use of existing electrical outlets.

F-7. Continuing education and training in the use of fixed and portable electrical equipment used for the diagnosis, treatment, monitoring and care of patients

Orientation and, minimally, annual continuing education and or training, will be given to all users of fixed and portable electrical equipment used for the diagnosis, treatment, monitoring and care of patients. This requirement applies to all individuals who use electrical equipment for the care of patients weather or not they are thoroughly familiar with the operation and use of a particular piece of equipment. This training and or continuing education will be documented IAW MEDDAC Reg 600-8-2 at MEDDAC facilities. DENTAC and VS, to which MEDDAC Reg 600-8-2 does not apply, will implement their own methods of documentation.

F-8. Addressing other applicable and more specific electrical safety hazards and considerations

Supervisors are responsible for ensuring other applicable or more specific electrical safety hazards and considerations are addressed in their areas of responsibility. Electrical safety procedures will be implemented to preclude and eliminate all fire, shock and other safety hazards. Some general requirements follow:

- a. Electrical cords will not be routed across an aisle or walkway, or otherwise impose a tripping hazard.
- b. Electrical cords will not be routed through holes in walls, ceilings or floors, nor will they be run through doorways, windows, or similar openings.
- c. Electrical equipment will be visually inspected (no documentation required) on a routine basis by the user to identify any hazardous defects. If any of the following defects are identified, immediately remove the equipment from service, attach a warning label or tag to it and coordinate necessary repair or replacement.
 - (1) Equipment with a loose or cracked chassis and or frayed or worn cords.
- (2) Equipment with energized or moving parts, such as fan blades, that are not protected or properly guarded.
- (3) Equipment that blows a fuse, trips a circuit breaker or causes the slightest shock when touched.
- (4) Equipment that is sparking, smoking or smells hot. In this case a suspected fire is evident and the appropriate fire reaction plan will be implemented IAW MEDDAC/DENTAC/VS Reg 420-2, chapter 6.
 - (5) Power cords repaired by use of tape.
 - (6) Power cords that are warm to the touch.
 - (7) Male plugs that have broken, bent or discolored blades.
 - (8) Receptacles, switches and plates that are loose or broken.
- d. All MEDDAC, DENTAC and VS personnel will be familiar with the means of properly disconnecting electrical power involving equipment used in their work area, including—
 - (1) Equipment on and off switches, and electrical cords and plugs.
 - (2) Circuit breaker panels and switches.
- e. The manufacturer's operating instructions or manual will be available in the workplace for each type of equipment in use. The instructions or manual will be readily available to all employees whenever the equipment is in use.
- f. Manufacturer-installed and manufacturer-equipped guards will not be removed from equipment. Such equipment will be used with the guards in place and properly adjusted.

Appendix G

Inspections, Hazard Surveillance, and Hazard Reporting

G-1. Safety inspections by the Safety Officer

- a. Standard Army Safety and Occupational Health Inspections (SASOHIs) are mandatory.
- b. SASOHIs will be conducted by the Safety Officer and may include other environment of care safety personnel.

- c. SASOHIs will be conducted semiannually in patient care areas and annually in all other areas for the purpose of identifying environmental deficiencies, hazards and unsafe practices. Special areas considered to be hazardous may be inspected more often, as determined by the Safety Office. Staff are encouraged to inform the Safety Officer of any alleged unsafe or unhealthful condition.
- d. No prior notice is required for these inspections. An employee representative may accompany the inspector(s); however, accompaniment may be denied any person, who in the judgment of the Safety Officer is or would be interfering with the inspection. Personnel in the area will be consulted regarding any unsafe or unhealthful working conditions that are identified during the inspection.
- e. All violations will be listed on either DA Form 4754 (Violation Inventory Log) or on a Microsoft Excel spreadsheet that contains all the data elements contained on DA Form 4754. A degree of danger or risk assessment code will be assigned to each violation.
- f. The Supervisor or NCO/Representative will be notified of any hazards found during the inspection and a written report will follow. The Safety NCO/Representative will respond with a plan of corrective action within 30 days.

G-2. Safety inspections

- a. Department chiefs; division chiefs; outlying clinic commanders, directors and chiefs; Commander, DENTAC; Chief VS; and supervisors shall identify hazards by evaluating the work environment and job tasks. The safety manager, fire marshal, and occupational health personnel will provide technical assistance for the evaluations.
- b. Monthly Safety Inspections. To provide a physical environment free of safety hazards, all chiefs who are directly subordinate to the DCA, DCCS, and DCN at KACC will conduct monthly safety inspections and initiate corrective actions and follow up as necessary. Outlying clinic commanders, directors and chiefs; Commander, DENTAC; and Chief, VS will conduct similar inspections within their facilities. MEDDAC Form 7 (Monthly Hazard Surveillance/Fire Inspection Checklist), will be used to assess compliance with fire codes, physical hazards, hazardous materials and wastes, electrical hazards, safety equipment, and personal protective equipment. This form may be obtained from the MEDDAC Administrative Services Officer or MEDDAC Safety Officer. Completion of the form is self-explanatory. Items may be added that the inspector feels are important and or unique to the department. Corrective actions will be initiated to correct all deficiencies noted. Following each monthly inspection, a copy of the completed MEDDAC Form 7 will be forwarded to the MEDDAC Safety Office where it will be reviewed.

G-3. The Hazard Identification and Abatement Program

- a. SASHOIs shall be conducted by trained Safety and Environment of care and IH.
- b. Safety deficiencies noted during safety, industrial hygiene, and fire inspections; accident investigations; or employee reports of unsafe or unhealthful conditions will be entered onto DA Form 4754 (Violation Inventory Log). (See paragraph G-3c, below.) Each hazard will be assigned a risk assessment code based on hazard severity and mishap (accident) probability.
- (1) Hazard severity. The four levels of hazard severity, which are always stated in upper case Roman numerals, will be assessed IAW table G-1, below.

Table G-1 Hazard severity					
Code	Category	Description			
I	Catastrophic	May cause death, permanent total disability, system loss, major property damage.			
II	Critical	May cause permanent partial disability or temporary total disability in excess of three months, major system damage or significant property damage.			
Ш	Marginal	May cause minor injury, lost workday accident, compensable injury or illness.			
IV	Negligible	May cause injury requiring first aid or minor supportive medical treatment, minor system impairment.			

(2) Mishap probability. This is the measurement of the probability of a hazard resulting in a mishap, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation and the affected population. The five levels of mishap probability, which will always be stated in upper case Arabic letters, will be assessed IAW table G-2, below.

Table G-2 Mishap probability					
Code	Category	Description			
Α	Frequent	Likely to occur frequently in the life of a system, item or facility.			
В	Probable	Probably will occur several times in the life of an item			
С	Occasional	Likely to occur sometime in the life of an item			
D	Remote	Unlikely, but possible to occur in the life of item			
Е	Improbable	So unlikely it can be assumed occurrence may not be experienced.			

(3) Risk Assessment Code (RAC). An expression of risk which combines the elements of hazard severity and mishap probability (see table G-3, below), RAC is always stated as an Arabic number

Table G-3 Risk assessment codes (RAC)								
Mishap probability								
		Α	В	С	D	Е		
	ı	1	1	2	3	5		
Hannad Oncode	Ш	1	2	3	4	5		
Hazard Severity	Ш	2	3	4	5	5		
	IV	3	4	5	5	5		

- c. DA Form 4754(or Microsoft Excel spreadsheet), the Violation Inventory Log.
- (1) DA Form 4754, or a printed copy of the Excel spreadsheet used in lieu of DA Form 4754, accompanied by a memorandum from the Safety Officer, will be sent to the immediate supervisor. A copy of the form (or spreadsheet) and memorandum will be maintained in the Safety Office and reported through the Safety and Environment of Care Committee.
- (2) If an imminent danger situation is discovered, the immediate supervisor and activity head will be notified immediately. The immediate supervisor will attempt to make corrections immediately. If corrections cannot be made immediately, personnel will be withdrawn from the danger as an interim measure.
- (3) If corrective action is not accomplished or interim safety measures are not enforced, the Safety Officer will determine the appropriate remedial action, which may include notifying the MEDDAC Commander.
 - (4) An analysis will be made of all hazards will be made noted on the DA Form 4754. DA

Form 5756 (Installation Hazard Abatement Plan) will be completed by the immediate supervisor for all hazards with a RAC of 1 or 2 which are not correctable within 30 days from the date of discovery.

- (5) Violations having a RAC of 3 or less, that cannot be corrected immediately, will be shown as "deferred" on DA Form 4754, until resources for correction become available. Risk assessments of 1 or 2 will be placed on DA Form 4753 (Notice of Unsafe or Unhealthful Working Conditions), which will be conspicuously posted on or near the hazard. Copies of all reports of all corrective actions taken must be sent to the Safety Office.
- (6) Cost of correction, future intended use of the facility, and availability of desirable alternative methods of control will be considered.
- (7) Priorities for correction of hazards will be based upon the assigned RAC. Hazards will be eliminated on a worst-first basis. Hazards with a RAC 1 or 2 shall be corrected within 30 days.
 - (8) Work orders will be submitted to the Facility Management Branch.

G-4. Hazard reporting

Hazard reporting is intended to reduce accidents by identifying and eliminating potential safety and health hazards as required by the Occupational Safety and Health Act and pertinent Army regulations. Anyone observing a safety or health hazard may report it to the Safety Officer in person, by telephone or electron mail, or on DA Form 4755 (Employee Report of Unsafe or Unhealthful Working Conditions). Reports may be anonymous. The name of the individual reporting the hazard will not be revealed if he or she desires anonymity. No harassment action will be taken against an individual for submitting a report of a safety or health hazard. Each report will be investigated by the Safety Officer. Any action made in response to the report will be reported to the individual who initiated the report. A supply of DA Forms 4755 shall be maintained by every MEDDAC, DENTAC and VS element. The form is available from the Safety Office. It may also be obtained from the Safety Program Manual and in electronic format in FormFlow.

Appendix H

Procedure for Handling Medical Gases and Liquids

H-1. Purpose

To establish responsibilities, policy and procedures for ordering, receiving, storing, testing, handling and issuing compressed gas and gas cylinders.

H-2. References

- a. AR 700-68, Storage and Handling of Compressed Gases and Gas Cylinders.
- b. NFPA 30, Flammable and Combustible Liquids Code.
- c. NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals.
- d. NFPA 99, Health Care Facilities.

H-3. Responsibilities

a. *The Chief, LOG*. The Chief, LOG will coordinate procedures for the acquisition, storage and handling of medical gases and liquids, provide associated training, and supervise the Oxygen

Quality Assurance Program.

- b. *The Chief, Medical Supply Material Branch*. The Chief, Medical Supply Branch will coordinate with the contract service provider to—
- (1) Confirm the presence of a tag indicating that a purity check was conducted prior to delivery. The oxygen test results may be recorded on DD Form 1191 (Warning Tag for Medical Oxygen Equipment), which will be attached to the cylinder. The tag will be annotated with the date the cylinder was analyzed, percent of oxygen, and initials of the tester.
 - (2) Ensure cylinders are not expired and that expiration labels are present on legible.
- (3) Designate in writing those individuals authorized to test oxygen cylinders, and ensure personnel are properly trained to perform the cylinder quality assurance functions.
- (4) Perform periodic inspections of cylinders to determine serviceability and proper coding. All unserviceable cylinders will be removed from service.
- (5) Store compressed gas cylinders IAW AR 700-68, NFPA 99 and TB MED 245 and ensure that all cylinders are properly segregated.
- (6) Ensure that each bulk liquid oxygen delivery is tested for quality prior to transferring the product to facility storage tanks.
 - (7) Perform routine inspections and preventive maintenance on bulk medical gas systems.
 - (8) Maintain test equipment utilized in the Oxygen Quality Assurance Program.
- (9) Perform required routine safety preventive maintenance and calibration services on medical equipment utilizing medical gases.
- (10) Perform work order maintenance on the liquid oxygen reservoir and continuous gas supply system (nitrogen and nitrous oxide).
 - c. The Chief, Facility Management Branch. The Chief, Facilities Branch will—
 - (1) Maintain all portions of the vacuum systems within the building walls.
- (2) Maintain all portions of installed gas systems within the building walls, machine room, and alarms.
- d. *The Safety Officer*. The Safety Officer will monitor the Oxygen Quality Assurance Program through the routine, recurring execution of the Safety Program.
- e. *Safety representatives*. Safety representatives will instruct staff in the proper handling and storage of cylinders; and that if the purity tag is missing or not properly annotated, to return the cylinder to the Material Branch for analysis or exchange.
 - f. Nursing and clinical staff personnel. Nursing and clinical staff personnel will—
- (1) Ensure that, prior to use, all oxygen cylinders are inspected to verify the presence of a purity tag and that the product is not expired.
- (2) Ensure the purity tag is annotated with the Julian date, quality of oxygen (ex-pressed as a percentage), and initials of the person who performed the check.

H-4. Policy

- a. Each time a shipment of oxygen cylinders is received from the vendor, the Chief, Medical Supply Branch will—
 - (1) Verify the invoice with quantity of gas cylinders received.
- (2) Visually inspect each cylinder for presence of safety cap, correct color and markings, and condition of the cylinder.
- (3) Confirm that the required information is on the purity and expiration labels and that it is legible. Medical oxygen must be at least 95% pure.

H-5. Procedures

- a. Cylinders without appropriate labeling or which appear unserviceable will not be accepted from the vendor.
 - b. Rotate cylinders within the storage area using the first in, first out principle.
- c. Each time a delivery of bulk liquid oxygen is received, the Chief, Medical Supply Branch will—
 - (1) Proceed to the bulk oxygen storage location with the oxygen analyzer.
- (2) Inspect all hoses, fittings, pipes, valves gauges and tanks in the storage area as well as those on the oxygen delivery truck that are being delivered.
- (3) Complete all necessary adjustments and corrections to allow the safe transfer of oxygen to the tank. (No transfer of oxygen will be allowed if any condition exists that might pose a hazard.)
- (4) Only authorized, trained personnel will connect the transfer hose and operate the valves within the storage area.
- (5) Each bulk liquid oxygen delivery will be tested for quality (at least 95% purity) prior to transferring the product to the facility storage unit. Samples of gas will be extracted from the delivery vehicle tank through the gaseous sampling port for testing. Caution will be exercised not to confuse a liquid sampling port for a gaseous sampling port. Severe injury could result from such an error. The quality of the oxygen will then be tested using the assigned oxygen analyzer.
- (6) If an unacceptable test reading is obtained (less than 95% pure) the test will be immediately repeated for verification. If the unacceptable reading is verified, immediately notify the Chief, LOG and promptly initiate follow up corrective action. Only supervisory personnel will release the delivery truck. All such incidents will be reported to the Safety Office.
- (7) The results of each analysis will be recorded and maintained by the Chief, Medical Supply Material Branch. These test results will be retained on file for two years from the date of the test and then destroyed.
- (8) Upon completion of safe transfer of oxygen the delivery truck will be released, the area secured, the oxygen analyzer secured, and the test results filed.

H-6. Special precautions for handling compressed gas cylinders

- a. Oil, grease and readily flammable materials will never be permitted to come in contact with oxygen cylinders, valves, regulators, gauges or fittings. Oxygen cylinders and apparatus will never be handled with oily or greasy hands, gloves or rags.
- b. Particles of dust and dirt will be cleared from cylinder valve openings by slightly opening and closing the valve before applying any fitting to the cylinder.
- c. The high-pressure valve on the oxygen cylinder will be opened before bringing the apparatus to the patient. The cylinder valve will be opened slowly, with the face of the gauge on the regulator pointed away from all persons.
 - d. An oxygen cylinder will never be draped with any materials such as gowns, masks or caps.
- e. Oxygen fittings, valves, regulators and gauges will never be used for any service other than that of oxygen.
 - f. Gases of any type will never be mixed in an oxygen cylinder, or any other gas cylinder.
- g. Oxygen will always be dispensed from a cylinder through a pressure regulator. Regulators that need repair and cylinders having valves that do not operate properly will never be used. Defective oxygen equipment will not be used.

- h. Oxygen cylinders will be protected from abnormal mechanical shock which may damage the cylinder, valve or safety device. Such cylinders will not be stored near elevators, corridors or in locations where heavy moving objects may strike them or fall on them.
- i. Valves will be closed on all empty cylinders in storage. Cylinder-valve protection caps, when provided, will be kept in place and be hand tightened, except when cylinders are in use or connected for use.
- j. Oxygen will be referred to by its proper name, *oxygen*, not *air*. Oxygen will never be used as a substitute for compressed air.
 - k. Cylinders or cylinder valves will not be repaired, painted, or altered.
- l. Safety relief devices in valves and cylinders will never be tampered with. Sparks and flames will be kept away from cylinders; a torch flame will never be permitted under any circumstances to come in contact with cylinder valves or safety devices. Valve outlets clogged with ice will be thawed with warm, not boiling, water.
- m. The markings stamped on cylinders will not be tampered with. It is against federal statutes to change these markings without written authority from the Bureau of Explosives.
- n. Identification markings used for the identification of contents of cylinders will not be defaced or removed. These include decals, tags, stenciled marks, and the upper halves of shipping tags.
- o. Even if they are considered to be empty, cylinders will never be used as rollers, supports, or for any purpose other than that for which they are intended.
- p. If small-size cylinders are in use, they will be attached to a cylinder stand or to therapy apparatus of sufficient size to make the entire assembly stable.
- q. Freestanding cylinders will be properly chained or supported in proper cylinder stands or carts. Cylinders will not be chained to portable or movable apparatus such as beds.
- r. Cylinders will not be supported by or placed in the proximity of radiators, steam pipes or heat ducts, and will be at least 20 feet from combustible materials.
- s. Cylinders will not be dropped, dragged, or rolled. Very cold cylinders or containers will be handled with care to avoid injury.
 - t. Full and empty cylinders will be segregated with empty cylinders marked "Empty."

H-7. Connection of cylinders

- a. The valve fittings of cylinders used to store different families of gases are different and will only allow regulators or needle valves to be attached that are safe for use with those gases. Use of adapters to connect regulators to cylinder valves defeats this safeguard and is not authorized. Only pressure regulators and needle valves approved for the gases may be used.
- b. Threads and points of union will be clean; these surfaces will be inspected before they are connected. If the gases are not toxic, the cylinder valves may be opened for a very brief period to blow dust and foreign materials out of the cylinder valve fittings.
- c. When attaching regulators or needle valves, the connections will be tightened firmly. Non-adjustable wrenches of the proper size will be used. Pliers or adjustable wrenches will not be used, as they damage the nuts, most of which are brass and rather soft. Need of excessive force often indicates that the regulators do not fit the cylinders. Leaks at the unions between the regulators and the cylinder valves are usually due to damage to the faces of the connections. Attempts to force a tight fit may damage the previously undamaged half of the connection. If the cylinder valve faces are damaged, the cylinders will be returned to the vendors. Employees will not attempt to repair them.

Damaged regulators will not be used until repaired.

- d. Cylinder valves will be opened slowly to prevent a sudden discharge of gas. During use, the valve will be opened fully and then closed one-half turn. This adjustment will ensure that the valve is free for rapid use when the need arises. Valves will be closed when gas is not being used.
- e. When a valve leak is discovered, the valve will be closed immediately. If the leak persists after closing, the cylinder will be moved to the outside and Medical Maintenance personnel contacted. Fire protection personnel will also be notified.
- f. If there is a leak between a cylinder and its regulator, the adjustment nuts will not be tightened until the cylinder valve has been closed.

H-8. Oxygen-enriched atmosphere fire hazards

- a. An oxygen-enriched atmosphere is defined as any area in which the concentration of oxygen is in excess of 23.5 percent. Such a situation may exist at any location where oxygen is used (canopies and tents), transported, or stored. An increased fire hazard is present in oxygen enriched atmosphere and caution will be used at all times to prevent ignition and combustion.
- b. Combustible materials are unavoidable when oxygen is being administered, but flammable liquids, gases and ignition sources are avoidable. Combustible materials which may be found near patients include hair oils, oil-base lubricants, skin lotions, facial tissues, clothing, bed linen, rubber and plastic articles, gas-supply and suction tubing, alcohols and acetone.
- c. The site of intentional expulsion (SIE) is defined as all points within one foot of a point at which an oxygen enriched atmosphere is intentionally vented into the atmosphere for a patient receiving oxygen via a nasal cannula or face mask. The SIE normally surrounds the mask or the cannula. However, you should be aware that actual expulsion can occur at other sites remote from the intended site due to disconnection, leaks or rupture of gas conduits and connections.
- d. Areas which are potential or actual oxygen enriched atmosphere will be kept clear of all nonessential combustible materials.
- e. Smoking materials (matches, cigarettes, lighters, and tobacco in any form (including smokeless tobacco), and non-essential electrical devices will be removed from the area.
- f. All equipment used in an oxygen-enriched atmosphere will be inspected by Medical Maintenance personnel and labeled prior to use. Defective electrical equipment will be tagged and turned in to Medical Maintenance for repair.

H-9. Cryogenic liquids

- a. The bulk oxygen system supply tank located near the dock area contains liquid oxygen. The potential hazards that accompany liquid oxygen are:
 - (1) Extreme cold which can freeze human tissue on contact.
- (2) Extreme pressure, which can result from rapid vaporization of the refrigerated liquid due to rising temperature from leakage of heat into the cryogenic container or system.
- (3) Fire or explosion in the case of escaping liquid oxygen, which, while not itself a flammable gas, can combine with organic materials with explosive violence.
- b. Normally, the potential for exposure exists only for tank truck operators and medical supply personnel during refilling and purity testing operations. To preclude unnecessary exposure during these operations, the following requirements will apply:
- (1) Liquid oxygen containers, piping and related equipment will be properly cleaned for oxygen service and will be kept clean and free of grease, oil and hydrocarbon materials. While oxy-

gen is nonflammable, it vigorously accelerates and supports combustion.

- (2) Medical supply personnel will receive training concerning the hazards involved and required safety precautions prior to being assigned to assist in this operation.
- (3) As a minimum, personnel involved in the operation will wear leather gloves, safety glasses or goggles, and all clothing will be free of oil and grease.
- (4) Unauthorized personnel will be advised not to congregate within 50 feet of the operation.
- (5) Smoking and other open flames are not permitted in any area where flammable liquids or gases or liquid oxygen are stored, handled, or used, or where they are loaded or unloaded.
- (6) If liquid oxygen spills on asphalt or other combustible substances (such as oil-soaked concrete or gravel), do not walk on or roll equipment over the area, and keep all sources of ignition away from the area for at least 30 minutes after all frost or fog has disappeared. (Neither liquid nor gaseous oxygen can be effectively blanketed by such fire extinguishing agents as carbon dioxide, dry chemical, or foam. If a fire should occur where liquid oxygen or gaseous oxygen is present, it is necessary to cool combustible materials below their ignition temperatures to stop the fire. One method of doing this is to use large quantities of water in spray form.)
- (7) If liquid oxygen is spilled on clothing, the clothing will be removed at once and aired before reuse. (Liquid oxygen spilled on clothing or another combustible substance can pose a serious hazard of fire or explosion due to the rapid chemical reaction between the two substances.)

H-10. Precautions for flammable and combustible liquids in laboratories IAW NFPA 99, Section 10-7

- a. Flammable and combustible liquids will be stored in approved containers.
- (1) Flammable (Class I) liquids have a flash point below 100°F (37.8°C) and a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100°F.
 - (2) Combustible (Class II) liquids have a flash point at or above 100°F.
 - b. Working supplies of flammable and combustible liquids will be limited.
- (1) The total volume of Class I and II liquids outside of approved storage cabinets and safety cans will not exceed 1 gallon (3.78 liters) per 100 square feet (9.23 square meters).
- (2) The total volume of Class I and II liquids, including those contained in approved storage cabinets in a laboratory will not exceed 2 gallons (7.57 liters) per 100 square feet.
- (3) No flammable or combustible liquids will be stored or transferred from one vessel to another in any exit corridor or passageway leading to an exit.
- (4) At least one approved flammable or combustible liquid storage room will be available within the MEDDAC. This room may maintain a reserve storage capacity of more than 300 gallons (1135.5 liters).
- c. Venting of storage cabinets will be permitted. Storage cabinets with approved flame arresters will be permitted to be exhausted through a fume hood exhaust system.
- d. Flammable or combustible liquids will not be positioned near Bunsen burners, ovens, hot pipes and valves or other sources of heat, in corridors, or within exhaust canopies.
- e. Smoking will not be allowed in any area where flammable or combustible liquids are used or stored. "No smoking within 50 feet" signs will be conspicuously posted near all entrances.
 - f. Oxidizing gases will be stored separately from flammable liquids.
 - g. Combustible liquids will not be stored with medical gases.
 - h. All flammable liquid dispensers will be properly grounded.

H-11. Ventilation requirements

Areas in which flammable, volatile, toxic or caustic materials are stored or used will be ventilated.

Appendix I

Personal Protective Equipment (PPE) Program

I-1. Purpose

To determine, assign and enforce the use of PPE within the command. PPE will be provided to employees when needed to prevent exposure to physical, chemical or biological agents that may cause harm through inhalation, absorption or other physical contact. In the health care environment, PPE may be needed to prevent worker exposure to hazards such as sterilants and disinfectants, radiation, electrical equipment and wiring, soiled laundry, hazardous drugs, medical waste and asbestos. Required PPE may include any one or combination of the following items: gloves, masks, gowns, protective eyewear, face shields, hearing protection and respirators.

I-2. Reference

29 CFR 1910.132-138 (OSHA's PPE standard).

I-3. Responsibilities

- a. *The Safety Officer*. The Safety Officer will develop the PPE Program, ensure it is implemented throughout the command, and administer it. This involves conducting workplace assessments to—
 - (1) Identify working conditions and potential hazards that necessitate the use of PPE.
- (2) Provide training and technical assistance to supervisors and safety representatives on the proper use, care and cleaning of PPE.
- (3) Provide guidance to supervisors and safety representatives for the selection and purchase of approved PPE.
 - (4) Review, update and evaluate the overall effectiveness of the PPE Program.
 - (5) Provide regulatory updates.
 - b. The Chief, Industrial Hygiene (IH). The Chief, IH will—
- (1) Conduct surveys to identify hazard areas and provide technical assistance to the Safety Officer to determine which occupational work locations require use of PPE.
 - (2) Administer appropriate monitoring of PPE use where indicated.
- c. *The Occupational Health Nurse (OHN)*. The OHN will provide pre-employment and medical surveillance physical examinations, as appropriate, based on potential job related hazards and exposures. As appropriate, vision screening and refractions will be provided by the Vision Conservation Officer for personnel requiring safety glasses. The appointment will be coordinated by Occupational Health.
- d. Supervisors and safety representatives are primarily responsible for implementing the PPE Program in their respective departments, divisions, clinics and areas. This involves—
 - (1) Identifying and evaluating hazards.
 - (2) Providing appropriate PPE to employees.

- (3) Ensuring employees are trained on the proper use, care and cleaning of PPE.
- (4) Maintaining records on hazard assessments.
- (5) Maintaining records of PPE assignments and training.
- (6) Notifying the Safety Officer when new hazards are introduced or when processes are added or changed.
 - (7) Storage of PPE.
 - e. Employees who use PPE.
 - (1) Employees who use PPE will—
 - (a) Wear PPE as required.
 - (b) Attend required training sessions.
 - (c) Care for, clean and maintain PPE as required.
- (d) Inform their supervisors and or safety representatives of the need to repair or replace PPE.
 - (2) Failure to comply with paragraph (1) may result in disciplinary action.

I-4. Hazard assessment

- a. Safety representatives will assess the workplace to determine the nature of hazards that may be present and assign appropriate PPE. The Safety Officer or Industrial Hygienist will assist with initial assessment. This assessment includes a walk-through survey to identify sources of hazards that include the following:
 - (1) Machinery or processes that could cause impact or collision.
 - (2) Chemical exposures.
 - (3) High temperatures that could cause burns, eye injury, or ignition of PPE.
 - (4) Harmful dust.
 - (5) Sources of light radiation.
 - (6) Sources of falling objects.
 - (7) Sharp objects.
 - (8) Electrical hazards.
- b. After the initial hazard assessment has been completed, the supervisor or safety representative will—
 - (1) Purchase and issue appropriate PPE.
 - (2) Ensure defective or damaged equipment is not used.
 - (3) Ensure required PPE is used by employees.
- c. Hazards will be reassessed by supervisors and or safety representatives when new products, equipment or procedures are introduced, or as needed.

I-5. Protective equipment selection

- a. *Eye and face protection*. Appropriate eye or face protection is required wherever there is a possibility of injury from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation (29 CFR 1910.133).
- (1) Eye and face protectors will meet all provisions contained in the American National Standards Institute (ANSI) standard (ANSI Z87.1-1989).
- (2) Suitable protectors will be used when employees are exposed to hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

- (3) Side protectors will be used when there is a hazard from flying objects.
- (4) Goggles will be used when there is a hazard from chemical or biohazard splashes.
- (5) For employees who wear prescription lenses, eye protectors will either incorporate the prescription in the design or fit properly over the prescription lenses.
- (6) Protectors will be marked to identify the manufacturer. Equipment fitted with appropriate filter lenses will be used to protect against light radiation.
- (7) All eye and face wash and shower equipment will be activated weekly to flush the line and to verify proper operation. Testing procedures will be documented weekly and the record will be posted next to the equipment.
- b. *Head protection*. Protective hats will be worn when hazards from falling or fixed objects, or electrical shock are present and will meet all provisions contained in ANSI standards (ANSI Z89.1-1969).
- c. *Foot protection*. Safety shoes will be worn when falling or rolling objects, punctures, cuts, or electrical hazards are present and will meet all provisions contained in ANSI standard (ANSI Z41.1-1967).
 - d. Hand protection.
- (1) Suitable gloves will be worn when hazards from chemicals, blood, body fluids, cuts, lacerations, abrasions, punctures, burns, and harmful temperature extremes are present.
- (2) Glove selection will be based on performance characteristics, conditions, duration, of use, and hazards present.
 - e. Protective clothing.
- (1) Protective clothing will be worn when hazards from heat, splashes of hot metals or liquids, caustic chemicals, blood and or bodily fluids, impacts cuts, acids, and radiation are present.
- (2) Clothing will be inspected to ensure proper fit and function for continued protection. It is important to refer to manufacturers' selection guides for the effectiveness of specific materials against specific chemicals.
- f. *Respiratory protection*. If exposures to respiratory hazards are identified through the hazard assessment then respiratory equipment will be worn. (See appendix K.)
- g. *Hearing protection*. Hearing protection will be worn before exposure to noise reaches hazardous levels. Normally, these are levels at or above a constant 85 dB or when noise levels could pulse to 140 dB for short duration. Selection for ear protection will meet the standards set by OSHA CFR 29 1910.95 and DA Pam 40-501.
- h. *Cleaning and sanitizing*. PPE will be capable of being cleaned and sanitized or otherwise disposed of. An item of PPE will not be shared between employees until it has been properly cleaned and sanitized.

I-6. Purchase request for PPE

- a. Requests and approvals for purchase or issue hearing protection and or respiratory PPE will be coordinated through IH and LOG.
- b. Requests and approvals for purchase or issue of protective eyewear and or protective footwear will be coordinated through the Safety Officer.
- c. Request and approvals for all other protective clothing and equipment will be reviewed by the Safety Officer and the Safety and Environment of Care Committee to ensure all applicable criteria have been addressed.

I-7. Training

- a. Any worker who is required to wear PPE will receive training in the proper use and care of PPE. Periodic retraining will be offered to employees and their supervisors as needed. The training will include, but not necessarily be limited to, the following subjects:
 - (1) When and what PPE is needed.
 - (2) How to properly put on, take off, adjust and wear the PPE.
 - (3) Limitations of the PPE.
 - (4) The proper care, maintenance, useful life and disposal of the PPE.
- b. After the training, the employees will demonstrate that they understand the components of the PPE Program and how and when to use PPE properly, or they will be retrained. A training record will be maintained for each employee.

I-8. Record keeping

Written records will be kept of the names of persons trained, the type of training provided, and the dates when training occurs. The supervisor will maintain the records for at least three years.

Appendix J

Prevention of Motor Vehicle Accidents

J-1. Purpose

To establish responsibilities, policy and procedures for prevention of motor vehicle accidents. This policy applies to all military and Army civilian employees operating Army motor vehicles (AMVs) General Services Administration (GSA) vehicles, commercial vehicles at Government expense, privately owned vehicles (POVs) at Government expense, and POVs on an Army or other Government installation.

J-2. References

- a. AR 40-2, Army Medical Treatment Facilities General Administration.
- b. AR 190-5, Motor Vehicle Traffic Supervision.
- c. AR 385-40, Accident Reporting and Records.
- d. AR 385-55, Prevention of Motor Vehicle Accidents, with MEDCOM Supplement 1.
- e. AR 600-55, Motor Vehicle Driver and Equipment Operator Selection, Training, Testing, and Licensing.
 - f. Code of Federal Regulations, Part 1230, Title 23, (23 CFR 1230).
 - g. Highway Safety Program standards No. 11 requirements.

J-3. Responsibilities

- a. *The Chief, LOG*. The Chief, LOG will maintain all of KACC's AMVs and GSA vehicles, except for the GSA van utilized by the mailroom, which is dispatched directly from the Installation Transportation Motor Pool by the unit mail clerk.
 - b. Supervisors. Supervisors will—
 - (1) Review the requirements of AR 385-55 as they apply to their area of responsibility.
 - (2) Ensure vehicle operators are performing inspections and operating vehicles in a safe

manner. Deadline vehicles scheduled for preventive maintenance and at any other time vehicle conditions make it unsafe to operate.

- (3) Complete a DA Form 285 or DA Form 285-AB-R on all vehicular accidents. See appendix B for reporting requirements.
- (4) Hold periodic safety briefings with drivers to emphasize proper procedures for operating vehicles and discuss any accidents, near misses, or current conditions (weather, road repair and traffic) that may have a bearing on the safe operation of vehicle.
- (5) Recognize safe government vehicle operators by nominating them for a safe driving award.
- c. Ambulance drivers and patient transport vehicle operators. Ambulance drivers and patient transport vehicle operators will receive additional training. Ambulances and other patient transport vehicles will be maintained and operated IAW AR 385-55, meeting all additional training, testing, and licensing requirements of the state of Maryland or Pennsylvania, as appropriate.
 - d. All vehicle operators. All vehicle operators will-
- (1) Maintain a valid driver's license and, for those assigned to Fort Meade and driving AMVs or GSA vehicles, a current defensive driver's training verification.
 - (2) Operate vehicles in a safe and prudent manner.
 - (3) Report unsafe operating conditions of vehicles.
- (4) If involved in a government vehicle accident, regardless of circumstances or accident severity, immediately report the accident to the police department whose jurisdiction they are in and also complete Standard Form (SF) 91 (Operator Report of Motor Vehicle Accident) and forward a copy of that form to the Safety Office within 5 working days of the date of the accident.
 - (5) Report all accidents to their supervisors.
- (6) Ensure that the vehicles or other equipment they are driving and the contents of the vehicle or equipment are properly secured when left unattended.
 - (7) Ensure that the vehicle or equipment is properly serviced during operation.
 - (8) Use installed restraint systems.

J-4. Policy on prevention of AMV accidents

- a. *General*. Most AMV accidents are caused by driver error. Drivers will be properly selected, trained and supervised. Defensive driver training is required for all drivers of AMVs who are assigned to Fort Meade. This training can be accomplished via computer in the Information Management Division or through the Installation Safety Office.
- b. *Emergency vehicle driver training*. Training for Emergency Medical Services (EMS) ambulance drivers will include Maryland or Pennsylvania laws, as appropriate, as they apply to the operation of emergency vehicles, use of emergency warning equipment (lights and sirens) and allowable maximum speed limits during emergency operation. EMS ambulance drivers will meet the requirements for training and licensing:
- c. *Investigating and reporting accidents*. AMV accidents will be investigated and reported by the installation Provost Marshal and the installation safety office IAW AR 190-5 and AR 385-40.
 - d. *Safe driving operation*.
- (1) Drivers will not be assigned to drive an AMV for more than 10 continuous hours, nor will the combined duty period exceed 12 hours in any 24-hour period without at least 8 consecutive hours of rest. If more than 10 hours are needed to complete operations, a qualified assistant driver will be assigned to each vehicle.

- (2) Drivers will take a 15-minute rest break every 2 to 3 hours of driving or every 100 to 150 miles, whichever occurs first. One-hour meal breaks will also be taken.
 - (3) The use of headphones or earphones while driving AMV is prohibited.
- (4) Drivers will not consume intoxicating beverages during the 8 hours before scheduled duty or during their normal duty shift.
- e. *Vehicle safety standards*. Drivers will perform before-, during- and after-operation checks to prevent the following conditions from occurring:
- (1) Improper functioning or adjustment of steering, lights, windshield wipers, horns, warning signals, side- and rear-view mirrors, restraint systems and other safety devices.
- (2) Improper conditions of windshields, windows, mirrors, lights, reflectors or other safety devices that are broken, cracked, discolored or covered with frost, snow or dirt.
- (3) Defective, inoperable or out-of-adjustment service or parking brakes. Any vehicle with defective parking brakes will be considered to be not mission capable (NMC) until repaired.
- (4) Any vehicle with a gasoline or brake fluid leak will be NMC until repaired. Any oil or water leak will be reported to the vehicle operator's maintenance supervisor.
- (5) Any condition likely to cause injuries to personnel or failure of a part. Examples are excessively worn tires, worn or frayed personnel restraint systems, torn metal with exposed sharp edges, damaged exhaust pipe shields, and leaky exhaust systems.
 - (6) Improperly secured loads or vehicle loaded beyond designed load limits.
 - (7) Unsafe transport of personnel.
- f. *Safe vehicle operation*. A vehicle identified with any safety defects will be considered NMC until properly repaired.
- g. Use of safety equipment. All personnel operating or riding as a passenger in an AMV, GSA vehicle, or government rented vehicle will wear safety belts. The operator is responsible for informing passengers of this requirement. The senior occupant is responsible for ensuring enforcement
- h. *Safe movement of personnel*. The senior occupant of a vehicle is responsible for ensuring the safe operation of the vehicle, including—
 - (1) Complying with local traffic laws and posted speed limits.
 - (2) Not exceeding the authorized seating capacity of the vehicle.
- (3) Assisting in vehicle operations (backing and alerting the driver to hidden obstacles and hazards).

J-5. Policy regarding accident prevention requirements

- a. *Use of safety restraints*. All Department of the Army personnel, and all other personnel riding as passengers, will utilize the vehicles' restraint systems while driving or riding in any government vehicle or any POV being driven on an Army installation.
- b. *Motorcycle training*. Each driver of a motorcycle or moped who is authorized to operate on an Army installation will be required to complete an Army-approved motorcycle safety course.
- c. Four-wheel drive AMV motor vehicle training. Documentation of training is required prior to use.
- d. *Defensive driving*. All operators of AMVs who are assigned to Fort Meade will complete the defensive driving class.

Appendix K Respiratory Protection Program

K-1. Purpose

To establish responsibilities, policies and procedures for a respiratory protection program that will assure adequate and proper protection for employees working in environments containing harmful concentrations of dusts, fumes, mists, gases or vapors.

K-2. References

- a. American National Standards Institute, ANSI Z88.2-1969, Practices for Respiratory Protection.
 - b. AR 11-34, The Army Respiratory Protection Program.
 - c. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
 - d. 29 CFR 1910.134, Respiratory Protection (OSHA).

K-3. Responsibilities

- a. *The Safety Officer*. The Safety Officer will monitor the Respiratory Protection Program.
- b. The Chief, Industrial Hygiene (IH). The Chief, IH will—
- (1) Evaluate respiratory hazards during execution of the Health Hazard Information Module Program and identify areas/locations where respiratory protection is required and provide technical guidance to ensure proper respiratory selection.
- (2) Recommend selection of respirators and submit those recommendations to the Infection Control Committee for approval. (Once approved, the respirator will only be used for its intended purpose.)
- (3) Provide fit testing to all employees designated to wear air-tight negative pressure facial seal respirators.
 - c. The Occupational Health Nurse (OHN). The OHN will—
- (1) Conduct medical evaluations to determine if employees are physically and psychologically able to perform work while wearing prescribed respiratory protection.
 - (2) Provide appropriate medical surveillance for personnel in the program.
 - d. Supervisors and safety representatives. Supervisors and safety representatives will—
- (1) Include respirator use in their SOPs whenever specific work processes necessitates respiratory protection. When it is suspected that respiratory protection is needed to protect personnel while performing a specific work operation, consultation will be made with the Safety Officer and IH; in the interim, no personnel will perform the suspect operation(s).
- (2) No respirator will be used without prior approval. The approval process, as a minimum, will consist of specific and appropriate respirator selection, worker acceptance factors, respirator wearer training, and fit and leak testing criteria IAW AR 11-34 and TB MED 502.
- (3) Records of respirator training and fit and leak testing for supervisors and relevant workers will be maintained by respective supervisors or safety representatives in coordination with, and guidance from, IH and the Safety Officer. The Safety Officer will also maintain an aggregate database of members enrolled in the respiratory protection program to include annual medical review and annual training.

- e. *Each employee required to use a respirator*. Each employee required to use a respirator will—
 - (1) Be familiar with this appendix, pertinent job site SOPs, and the respirator to be used.
 - (2) Use the respirator IAW the instructions and training given.
- (3) Perform positive and negative pressure tests each time the respirator is to be used, if such is required to ensure proper fitting, seal and valve function.
- (4) Ensure that necessary maintenance and cleaning of the assigned respirator is accomplished and or coordinated by the supervisor.
- (5) Properly store, protect, and secure the respirator in a clean and sanitary manner and in an approved and designated location.
- (6) Notify their supervisor and or safety representative in the event it is suspected or known that a respirator is ineffective or in need of replacement (or if it is suspected that respiratory protection is needed for a particular operation). In the interim, do not perform or otherwise be exposed to the hazardous or suspected hazardous operation.
- (7) Wear respiratory protective equipment (RPE) only after satisfactory annual medical evaluation.

K-4. Policy

- a. Whenever possible, nontoxic or less toxic substances will be substituted for toxic substances.
- b. Whenever possible and feasible, engineering controls will be implemented to reduce respiratory hazards. Methods will include but not be limited to installation of local or general exhaust systems, and segregation, isolation or alteration of processes or operations.
- c. Respiratory protection will only be used as a means of controlling employee exposure to respiratory hazards under the following circumstances:
- (1) When no engineering or work practice controls can be used to adequately control the hazard.
 - (2) During intermittent or non-routine operations.
- (3) During interim periods while engineering controls are being designed and installed to eliminate the hazard.
 - (4) During emergencies.
 - (5) When required by other federal regulations or operating license.
- d. Respiratory protection will be furnished at no cost to the employee and will be used as a condition of employment as stated in the employee job description for the specific work area or function duty.
- e. When full face piece respirators or hoods are used, corrective lenses will be provided to fit the face piece. Contact lenses will not be worn.
- f. Employees whose work requires the wearing of RPE will not have beards, sideburns, or other hair that will negate the effectiveness of the RPE by preventing an air-tight facial seal. (Exception: Powered Air Purifying Respirator.)
 - g. All respirators will be reviewed by the IH for proper selection.
- h. Respirator selection. Respirators will be selected and used upon the basis of airborne contaminant concentration and nature of the hazards to which the worker is exposed, the work environments and conditions, and the characteristics and the limitations of the respirators. All respiratory protective equipment used will carry the NIOSH/MSA approval for the use for which it

is intended. RPE will be used only for the purpose intended and no modifications of the equipment will be made.

K-5. Tuberculosis exposure control

Identified at risk employees in designated sections/clinics with potential expose to bioaerosols containing *Mycobacterium tuberculosis* will wear an approved type respirator IAW NIOSH guidelines and 42 CFR 84. See MEDDAC/DENTAC Reg 40-21 for more guidance.

K-6. Use, care and maintenance of respiratory protection

- a. Respirators will be used by personnel when work hazards create a need for such protection.
- b. Regular cleaning and disinfecting of this equipment is necessary.
- (1) Respirators assigned to individuals need to be cleaned at the end of each day or sooner, if necessary when in use.
- (2) Respirators used by more than one worker will be cleaned and disinfected after each use.
 - c. Proper maintenance is important to retain the respirator's original effectiveness.
 - (1) Routinely inspect all respirators before and after each use.
 - (2) Check the tightness of connections.
- (3) Evaluate the condition of the face piece, headbands, valves, connecting tube, and canisters.
 - (4) Inspect elastomer and rubber parts for pliability and signs of deterioration.
 - d. Only trained and experienced personnel are authorized to replace respirator parts.
 - (1) Parts used will be manufactured for the respirator that needs the parts replaced.
 - (2) Manufacturers' recommendations will be followed.
 - (3) Return all reducing and emission valves and regulators to the manufacturer for repair.
 - e. Store respirators in a clean, convenient, and sanitary location.
- (1) Respirators will be stored so that the face piece and valve rest in a normal position, precluding malformation of the equipment.
 - (2) Protect respirators from adverse conditions such as heat and chemicals.

Appendix L Safety Training Program

L-1. Purpose

To establish requirements, policies, procedures and supervisory responsibilities for conducting safety education and training within the MEDDAC, DENTAC and VS.

L-2. General

The objective of the Safety Program is to prevent accidents. Accidents are caused by a combination of some degree of hazard and an unsafe act or behavior. Accident prevention is, therefore, dependent upon reduction or minimization of hazards and the promotion of safe behavior. Safety education and training is essential to the development of safe behavior and hazard minimization.

L-3. Specific

All newly assigned and attached personnel will attend New Employee Orientation not later than 30 days after job assignment. The orientation will include a general Safety Program review, as directed by the Safety Officer. Documentation for this training will be maintained by PTM&S. Documentation will also be included in the employee's CBO folder.

L-4. Supervisory responsibilities

Supervisors will ensure that the following training is provided during initial department-level orientation. (Use the Safety Orientation Checklist found in the Safety Program Manual.)

- a. A review of safety regulations and the department or service safety SOP. This includes bomb threat procedures and emergency management procedures.
- b. Fire safety including the fire reaction plan and evacuation procedures, and the location and use of portable fire extinguishers, fire alarms, and exits.
 - c. Tobacco policy.
 - d. Accident and incident reporting.
- e. Safe working practices and hazard awareness to include electrical safety; back injury prevention; how to avoid slips, trips, and falls; and how to prevent cuts and punctures, especially needlesticks.
 - f. Patient safety.
 - g. Proper use of equipment IAW technical manuals, if applicable.
 - h. Standard for handling medical gases and liquids, if applicable.
- i. Motor vehicle and motorcycle safety. Mandatory use of vehicle restraining devices. Emergency vehicle safety, if applicable.
 - j. Long weekend and holiday safety.
 - k. Seasonal safety including hot, cold, and sports injury prevention.
 - 1. Any other pertinent safety and health training as applicable.
- m. The training requirements can be met through lectures, videotape programs, slide programs, handouts and safety-grams. Furnish a copy of the attendance roster to the Safety Officer. Document on MEDDAC Form 7. All training documentation will be maintained in the department where the staff member is assigned. If the documentation is being maintained in the individual clinics and not at the department level, the employee's safety training documentation will be transferred with him or her whenever he or she is transferred to a new work area.

Appendix M Hearing Conservation Program (HCP)

M-1. Purpose

To protect the employee from hearing loss due to occupational noise exposure.

M-2. References

- a. AR 40-5, Preventive Medicine.
- b. DA Pam 40-501, Hearing Conservation Program.
- c. DA Pam 40-503, Industrial Hygiene Program.

- d. U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Technical Guide (TG) 167A, Hearing Evaluation Automated Registry System (HEARS) Audiometer Opera-tion Manual.
 - e. USACHPPM TG 181, Noise Dosimetry and Risk Assessment.

M-3. Special terms

- a. *A-weighted decibels (dBA)*. Sound pressure level measured with a sound level meter set to the A-weighted network and which meets the ANSI S 1.4-1983 requirements. The A-weighting network reduces the contribution of lower frequencies, which are of less concern for hearing conservation.
- b. Change in operation. Any increase in the number of noise-exposed employees and or any technological changes in the work environment. For example: building renovations, and additional or reduced numbers of noise-hazardous equipment per 29 CFR 1910.95(d)(3).
- c. Decibel (dB). The unit of measurement used to express sound pressure level (SPL). The dB level of a sound is related to the logarithm of the ratio of sound pressure to a reference pressure. The dB has meaning only when the reference quantity is known. The internationally accepted reference pressure in acoustics is 20 uPa which corresponds to 0 dB. This value is used in the most current acoustical literature. In the past, other units, including 20 micronewtons per square meter, 0.0002 microbar, and 0.0002 dynes per square centimeter, all physically equivalent to 20 uPa, have been used
- d. 8-hour time-weighted average (TWA) sound level. A measure of the severity of the employee's workday noise environment. The TWA is an expression of the constant noise level, measured in dBA, which can potentially produce the same hearing damage over an 8-hour period, as the actual workday noise exposure. The TWA is always computed as if the TWA noise level is present for an 8-hour work shift, whether or not the workday noise lasts for 8 hours. Because the TWA is a measure of the noise environment, it does not reflect the effects of any hearing protection worn by the employees. Implicit in the TWA is a 3-dB time-intensity exchange rate.
- e. *Occupational medicine staff*. An OH physician, audiologist, OH nurse, industrial hygienist, radiation protection officer, optometrist, and technicians of each specialty area.
- f. OSHA reportable hearing loss (RHL). Present when an individual has an increase in hearing thresholds ≥10 d13 for the average of 2000, 3000, and 4000 Hz in either ear, as compared to the individual's original (first) baseline hearing test if overall hearing loss is at least 25 dB from zero at the same frequencies in the same ear. It is reported one time and is not reported again until there is an additional increase of ≥10 for the average of 2000, 3000, and 4000 Hz, in the same ear as the previous increase, or if there is a change in hearing ≥25 dB for the average of 2000, 3000, and 4000 Hz in the other ear, as compared to the original baseline if overall hearing loss is at least 25 dB from zero at the same frequencies in the same ear. For example: if the first OSHA RHL is reported in 1995 and an additional average increase of 25 dB does not appear until 1998, the OSHA RHL would only be reportable in 1995 and 1998, *not* in the intervening years.
 - g. Ototoxin. Ear poison.
- h. *Peak measurement decibels (dBP)*. Unit used to express the peak SPL of impulse noise. It is equal to 20 times the common logarithm of the ratio of the highest instantaneous sound pressure to a reference pressure of 20 uPa.
- i. *Unit Hearing Conservation Officer*. The individual designated in writing to manage the unit's HCP and to serve as a point of contact.

M-4. Responsibilities

- a. *The Chief, PM or designee*. At any MTF where audiologists are available, the Chief, PM or designee will—
- (1) Appoint an audiologist to act as the Hearing Conservation Program Manager (HCPM). If there is no audiologist on an MTF's staff, an employee from the MTF's occupational medicine staff will be appointed to act as the HCPM.
- (2) Appoint an individual, IAW DA Pam 40-503, to act as the Industrial Hygiene Program Manager (IHPM).
- (3) Ensure maximum use of occupational health resources, where available, to conduct monitoring of audiometry in accordance with AR 40-5.
 - (4) Ensure that a physician determines the diagnosis of noise-induced hearing loss.
- (5) Notify the immediate supervisor and; if it concerns a civilian employee, the civilian personnel officer, of any employee who has sustained permanent hearing loss which may endanger him or her or others.
 - (6) Maintain audiometric testing and noise exposure records.
 - (7) Provide audiometric test records and noise exposure information on request.
- (8) Notify an employee and his or her supervisor whenever there is a positive significant threshold shift.
- (9) Report OSHA reportable hearing loss of civilian employees to the Safety Officer and IHPM.
 - (10) Provide health education materials on request.
- (11) Analyze audiometric data, exposure data, and job classifications to identify work areas and classifications associated with threshold shifts, regardless of statistical significance level, and notify the supervisor, Safety Officer, and IHPM.
- b. *The HCPM*. IAW AR 40-5, the HCPM will manage and coordinate all aspects of the HCP outlined in the DA Pam 40-501. These responsibilities include—
 - (1) Drafting and staffing an installation memorandum of instruction detailing the HCP.
- (2) Ensuring that medically trained personnel fit employees with preformed earplugs, then examine these employees at least once annually to ensure proper earplug condition and fit.
 - (3) Repositioning and maintaining a supply of preformed earplugs.
- (4) Providing a pair of preformed earplugs and earplug carrying case to all noise-exposed employees.
- (5) Ensuring that monitoring of audiometry is performed using guidance provided in DA Pam 40-501, chapter 7, and USACHPPM TG 167A.
 - (6) Providing health education annually.
 - (7) Conducting unannounced inspections of noise-hazardous areas.
- (8) Reporting program participation, quality assurance, and program effectiveness and readiness measures.
 - (9) Training unit hearing conservation officers in their assigned duties.
 - c. The Safety Officer. The Safety Officer will—
- (1) Inspect work sites to identify potential noise hazards and bring them to the attention of IH
- (2) Monitor the wearing and use of hearing protective devices in identified noise hazard areas and notify IH and the supervisor of non-compliance with the hearing protection requirement.
 - (3) Record reportable hearing loss as an occupational illness or as a 1-time acoustic

trauma on the OSHA Log.

- d. The Industrial Hygienist. The Industrial Hygienist will—
- (1) Survey all known and suspected noise-hazardous areas and equipment and ototoxic exposures at least once and within 30 days of any change in operation using approved equipment that has been calibrated.
- (2) Perform an initial evaluation within 30 days of notification of potential noise-hazardous or ototoxic work sites identified by the Safety Officer.
- (3) Establish an 8-hour time-weighted average sound level (TWA) for all civilians working in noise-hazardous areas and soldiers working in noise-hazardous industrial operations by using the guidance provided in USACHPPM TG 181.
- (4) Maintain a current inventory of all noise-hazardous areas using DD Form 2214 (Noise Survey), DD Form 2214C (Noise Survey Continuation Sheet), the Defense Occupational Health Readiness System-Hearing Conservation Database and or the Health Hazard Information Module Database, as appropriate.
- (5) Provide, in writing, the names and social security numbers of noise-exposed and ototoxic-exposed employees and the magnitude of their noise exposure to—
 - (a) The HCPM.
 - (b) The employee's unit commander or supervisor.
 - (c) The IHPM.
- (6) Establish hearing conservation RACs and forward noise survey results that indicate a violation to the designated safety officer for inclusion on the violation inventory log.
- (7) Establish noise contours where appropriate and feasible and advise supervisors and unit commanders on how to properly post these contours.
- (8) Notify the civilian personnel officer of noise-hazardous and ototoxic areas for inclusion in job descriptions.
 - e. Unit commanders or supervisors of noise-exposed personnel will—
 - (1) Appoint a hearing conservation officer.
 - (2) Develop a unit Hearing Conservation Program SOP, detailing the HCP.
- (3) Purchase equipment that generates the lowest noise levels and ototoxic exposures feasible.
- (4) Notify the HCPM of any suspected hazardous noise levels or changes in hazardous noise levels in the work area.
 - (5) Provide appropriate hearing protectors, free of charge, to noise-exposed personnel.
- (6) Endorse the command emphasis letter highlighting the importance of hearing conservation.
 - (7) Ensure all noise-exposed or ototoxic-exposed personnel under their supervision—
- (a) Receive appropriate reference, 90-day periodic (at least annually), and follow up hearing tests.
 - (b) Attend annual hearing conservation health education briefings.
- (c) Follow recommendations from audiometric examinations, medical evaluations, and noise or ototoxic surveys.
 - (d) Wear hearing protectors.
 - (e) Report for scheduled medical examinations.
 - (f) Are notified of their noise and ototoxic chemical exposure levels.
 - (g) Are allowed to choose from appropriate, approved hearing protectors.

- (h) Report for termination hearing tests no later than two weeks prior to termination of employment.
 - (i) Wear noise and ototoxic chemical dosimeters when requested to do so.
- (8) Ensure that noise-exposed employees under their supervision retain a pair of preformed earplugs and an earplug carrying case as an item of their individual equipment.
- (9) Require noise-exposed soldiers to wear the earplug carrying case, with earplugs, as part of the battle dress uniform, when appropriate.
- (10) Maintain copies of regulations, technical bulletins and other hearing conservation directives and guidance. Provide to employees upon request.
- (11) Ensure that noise-hazardous areas, vehicles, and equipment are marked with proper danger and caution signs and decals.
- (12) Post a copy of DA Poster 40-501A (Occupational Noise Exposure Standard and Hearing Conservation Amendment) in each work area.
 - (13) Monitor the use of engineering controls.
- (14) Refer employees under their supervision to the MTF or OH for any hearing problems or complaints associated with wearing hearing protectors.
 - (15) Initiate disciplinary action when appropriate.
- (16) Ensure, per AR 385-10, when applicable, that the following procedures are included in military and civilian supervisor's performance standards and support forms in order to enforce the use of PPE and that employees report for scheduled medical examinations.
 - f. Noise-exposed personnel will—
- (1) Correctly wear approved and properly fitted hearing protectors when exposed to hazardous noise.
- (2) Report for all scheduled medical examinations and health education training associated with hearing conservation.
 - (3) Report hearing or hearing protector problems to their supervisors.
 - (4) Maintain hearing protectors in sanitary and serviceable condition.
 - (5) Wear noise and ototoxic chemical dosimeters when requested.
 - (6) Keep hearing protection readily available at the job site.

M-5. Specific

- a. The most desirable hearing conservation measure is reducing noise levels at their source and eliminating harmful health effects. In many instances, simple maintenance will eliminate or control the hazard. To the extent possible, engineering will be used to eliminate or reduce the hazard. Where not possible, hearing protection will be provided and used by employees in the exposure area.
 - b. Suspected noise hazard areas will be surveyed by the Industrial Hygienist.
 - c. Work sites with noise hazards require a written hearing conservation SOP.
 - d. Noise hazard areas will be posted with appropriate warning and caution signs.
 - e. Enrollment in the HCP.
 - (1) Personnel will be enrolled in a comprehensive HCP when they are exposed to—
- (a) A steady-state noise with a TWA of 85 dBA or greater. (This criterion applies only to energy in the audible range up to 16000 Hz.)
 - (b) An impulse noise of 140 dBP or greater.
 - (c) An airborne high frequency or ultrasonic noise, regardless of duration, in any of

the one-third octave bands exceeding the value listed in DA Pam 40-501.

- (d) Known or suspected ototoxins.
- (2) Excessive exposures to a workplace ototoxin can on its own result in hearing loss. See DA Pam 40-501 for a list of potential toxic chemicals. In combination with noise exposure; even marginal noise exposures, ototoxins can have a synergetic impact on hearing, producing more damage than a higher exposure to either hazard. Activities where noise and ototoxins often combine include, but are not limited to painting, printing, and construction.
 - f. Noise-exposed personnel require the following:
- (1) An audiogram, health education, and earplug fitting or inspection will be obtained annually. These services will be provided by Audiology (Hearing Conservation Center).
- (2) Hearing protection devices when noise level between 85 to 103 dB. Above 103 decibels, both plugs and ear muffs are required. Employees are referred to audiology for hearing protection to be issued and fitted.
- (3) Greater than 108 dBA, exposure is not permitted. Administrative controls, such as limited noise exposure time, must be used.

Appendix N Latex Safety Policy

N-1. Purpose

This policy outlines guidelines for identifying, reducing and or eliminating health risks associated with latex sensitivity and allergy in the health care setting. The goal is to provide a latex-safe medical treatment facility for patients and staff.

N-2. Scope

The provisions of this policy apply to patients, soldiers, and employees who work in the MEDDAC and activities provided occupational health support by the MEDDAC. The term "employee" refers to military personnel, civilian personnel and volunteers unless stated otherwise. Contract workers may receive initial evaluation and treatment in urgent situations with subsequent billing from third party collections. Contractors are required to provide occupational health services for their employees in accordance with Federal laws and regulations.

N-3. Definitions

- a. *Latex*. Natural latex rubber is a particular type of rubber that has been manufactured from the sap of the H*evea brasiliensis* tree (not synthetic rubber). The sap contains low molecular weight soluble proteins that are the likely allergen cause. New rubber products, especially very soft ("dipped") products, contain the greatest proportion of these soluble proteins.
 - b. Latex sensitive/high risk populations for latex reactions and anaphylaxis.
- (1) Health care workers (physicians, nurses, surgical team, lab workers and clinical therapists).
- (2) Patients with history of neural tube defects (spina bifida) and congenital genitourinary abnormalities. (All patients with spinal bifida will be treated as latex sensitive.)
 - (3) Patients who have undergone multiple surgical procedures and patients with a

history of intraoperative anaphylaxis of uncertain etiology may be at increased risk for latex reaction. (The decision on whether or not to treat as latex sensitive will depend on the judgment of the primary care provider.)

- (4) Patients requiring chronic bladder catheterization (spinal cord trauma or neurogenic bladder).
- (5) Individuals with certain food allergies, such as banana, avocado, chestnuts and kiwi fruits, may be allergic to latex.
- (6) At-risk workers in other occupations include fire fighters, police, security personnel, emergency response workers, janitorial workers, food handlers and day care workers.
 - c. Types of latex reactions.
- (1) *Irritant contact dermatitis*. The most common reaction to protective gloves is irritant contact dermatitis. It usually produces dry, itchy, irritated areas on the skin, usually the hands. This reaction is caused by irritation from wearing gloves and possibly by using gloves and exposure to other workplace products and chemicals. This reaction can also result from repeated hand washing and drying, incomplete hand drying, use of cleaners and sanitizers, and exposure to powders added to gloves. This is not a true allergy.
- (2) Chemical sensitivity dermatitis (Allergic contact dermatitis) (Type IV). Allergic contact dermatitis/delayed hypersensitivity results from exposure to chemicals added to latex during harvesting, processing or manufacturing. These chemicals can cause a skin rash similar to those caused by poison ivy. As with poison ivy, the rash can begin 24-48 hours after contact and may progress to oozing skin blisters or spread away from the area of skin touched by the latex.
- (3) Latex allergy (Immediate hypersensitivity reaction.) (Type I). This is a more serious reaction to latex than irritant or contact dermatitis. Certain proteins in latex may cause sensitization (positive blood or skin test, with or without symptoms). Although the amount of exposure needed to cause sensitization or symptoms is not known, exposures at even very low levels can trigger allergic reactions in some sensitized individuals. Reactions usually begin within minutes of exposure to latex, but they can occur hours later and can produce various symptoms. Mild reactions to latex involve skin redness, hives, or itching. More severe reactions may involve respiratory symptoms such as runny nose, sneezing, itchy eyes, scratchy throat, and asthma. Shock may occur.

N-4. Responsibilities

- a. *The Deputy Commander for Nursing*. The Deputy Commander for Nursing will ensure that SOPs are developed for Same Day Surgery and the Operating Room for latex sensitive surgical cases.
 - b. The Chief, Logistics Division. The Chief, Logistics Division will—
- (1) Assist clinical sections in the identification of latex free alternative products using the Universal Data Repository (UDR) medical catalog.
- (2) Obtain expendable medical supplies upon the submission of DA Form 3953 (Purchase Request and Commitment).
 - c. The Chief, Pharmacy Service. The Chief, Pharmacy Service will—
 - (1) Document latex allergy in the patient's medication profile.
- (2) Intervene on medication orders that put the patient at risk for exposure to latex. For example: multi-dose vials.
 - d. The OH Physician. The OH Physician will—
 - (1) Perform initial evaluation of suspected latex allergy and coordinate employee referral

to the Allergy and Immunology Service for Dermatology, WRAMC and or an allergy specialist evaluation, if needed.

- (2) Annotate the employee's medical record to indicate latex allergy. Notify supervisors of the employee's need for accommodation for latex allergy, if indicated. Evaluate work sites of employees diagnosed with latex allergy.
 - e. The Occupational Health Nurse. The Occupational Health Nurse will—
- (1) Screen all at-risk employees during inprocessing and annually thereafter in conjunction with Birth Month Annual Review.
 - (2) Provide educational training materials on latex allergy issues as appropriate.
 - (3) Evaluate employees with symptoms suspected to be due to latex allergy.
- (4) Maintain an aggregate latex allergy database. Review the database annually to determine latex allergy incidence and prevalence.
 - f. The Safety Officer. The Safety Officer will—
 - (1) Review the Latex Safety Policy annually and update it as necessary.
 - (2) Document all latex allergies as illnesses on the OSHA 300 Log.
- g. *The Chief, Allergy/Immunization Clinic*. The Chief, Allergy/Immunization Clinic will serve as MEDDAC consultant to Occupational Health and providers on current latex issues and practices as well as latex allergy detection and treatment.
 - h. Health care providers. Health care providers will—
 - (1) Perform initial evaluation of suspected latex allergy of any patient.
 - (2) Refer to the WRAMC Allergy and Immunology Service for evaluation, if indicated.
 - i. Supervisors. Supervisors will—
- (1) Be aware of environmental risks regarding latex exposure and arrange for latex-free alternatives as deemed necessary for patients and staff.
- (2) Ensure latex allergy patients and employees with suspected latex allergy are identified IAW this policy and that employees report to Occupational Health for latex allergy screening and screening documentation.
- (3) Ensure that latex-free PPE is available in all work sites areas with employee and patient latex allergy.
 - j. Employees. Each employee will—
 - (1) Become familiar with procedures for preventing latex allergy.
- (2) Take all necessary steps to protect themselves from excessive latex exposure in the workplace, if allergic to latex.
- (3) Opt for non-latex gloves for activities not likely to involve contact with infectious materials.
 - (4) Wash hands after using gloves.
 - (5) Learn to recognize the symptoms of latex allergy, which are—
 - (a) Skin rashes.
 - (b) Hives.
 - (c) Flushed skin.
 - (d) Itching, nasal, eye, and sinus symptoms.
 - (e) Asthma.
 - (f) Shock.
- (6) Report any suspicion of development of latex allergy to the supervisor and Occupational Health.

- (7) Inform the supervisor and co-workers of any documented latex allergy.
- (8) Consider wearing a medical alert bracelet to alert co-workers of latex allergy.
- (9) Inprocess through Occupational Health and visit annually thereafter during Birth Month Annual Review.

N-5. Policy for preventing allergic reaction to latex

- a. Workers will be provided non-latex gloves for activities that are not likely to involve contact with infectious materials, such as food preparation, routine housekeeping and maintenance.
- b. Appropriate barrier protection will be used when handling infectious materials. Surgical and examination gloves will be powder-free to protect the worker from the latex protein particles bound to the powder.
 - c. Appropriate work practices will be followed to reduce the chance of reactions to latex.
- (1) When wearing latex gloves, the employee will not use oil-based hand creams or lotions that may cause glove deterioration.
- (2) After removal of gloves, hand hygiene should be practiced. (Wash hands with a mild soap and water and dry thoroughly.)
- (3) Good housekeeping will be practiced. Housekeeping personnel will frequently clean areas contaminated by latex dust. Ventilation filters and vacuum bags will be changed frequently in all latex contaminated areas.
- d. Workers will be provided with information regarding latex allergy. Training will be documented.
- e. At-risk health care workers and patients will be informed regarding the hazards of latex exposure to enable them to learn to recognize the symptoms of latex allergy and become familiar with the preventive procedures.
- f. Health care workers and others working with latex will be screened to identify high risk individuals.
 - (1) Outpatients will be screened prior to invasive procedures.
- (2) Employees will be screened by Occupational Health using MEDDAC Overprint 387 (Occupational Health Latex and Rubber Hypersensitivity Screening Questionnaire) at inprocessing and during annual health assessments.
- g. When high risk employees are identified, they will be referred by the OH Physician to the WRAMC Allergy and Immunology Service for Dermatology and or allergy specialist evaluation, if indicated
- h. Workers at increased risk for latex allergy symptoms will be screened periodically. Early detection and removal from latex exposure are essential for preventing long-term health effects.
- i. The health care facility will reduce and or eliminate latex health risks as much as possible to make the environment latex safe for patients and staff.
- j. Surgical procedures on patients with positive histories of latex allergy and all patients with spina bifida, regardless of history, will be performed in a latex-free area. (Schedule the procedure with WRAMC.)

N-6. Management of latex sensitized patients and staff

- a. Individuals with latex hypersensitivity require early identification and reduction or elimination of latex exposure. Interventions will be tailored according to the severity of the problem.
 - b. Individuals with irritant dermatitis will be educated regarding the risk of latex allergy and

advised to use cotton liners in their gloves and or eliminate the unnecessary use of gloves. Attempts will be made to identify the irritant and eliminate the risk with good hand care techniques such as thorough and frequent hand washing.

- c. Those identified with allergic dermatitis or delayed sensitivity should be referred for skin testing and will continue to use powder-free or non-latex gloves when possible.
- d. Individuals who have local allergic reactions, such as contact urticaria should be referred to WRAMC dermatology for follow up evaluation and treatment. If possible, these individuals should work in latex-safe environments.
- e. Those who have sustained systemic allergic reactions to latex should be evaluated by WRAMC Dermatology or WRAMC Allergy and Immunology.
- f. Patients with a positive history of atopy (an allergy for which there is genetic disposition), multiple allergies, latex glove intolerance or allergies to medical products (such as catheters) should receive blood tests for IGE.
- g. Patients requiring a surgical procedure, who have a documented anaphylactic reaction to latex (Type I) must have the procedure done at an inpatient facility.
 - h. Measures to reduce the prevalence of latex containing items is ongoing.

N-7. Patient management

- a. *General precautions*. General precautions for latex-allergic patients applying to all clinics, clinical support areas, and same day surgery unit are as follows:
- (1) Include questions about latex allergy when taking patient histories. Document the signs and symptoms of the patients' allergic reactions.
- (2) Place allergy identification bands on the wrists of inpatients. Encourage outpatients to wear the medic alert identification bracelet at all times. Note the allergy in the Composite Health Care System.
 - (3) Note the latex allergy on the front of the outpatient record.
- (4) Providers will document the latex allergy on the patient's master problem list and progress notes.
- (5) Put clean, visible signs on the doors to the patient's room stating that there is a latex-sensitive patient in the room.
- (6) Use non-latex gloves. If not wearing latex free gloves, wash hands thoroughly before entering the room to remove any traces of latex.
 - (7) Make clinic appointments as early in the morning as possible.
- (8) Place stopcock in IV lines for injection of drugs and tape over the latex ports. If medications are to be added, use the port where the tubing has been spiked. Do not use pre-filled medication syringes without first contacting the pharmacy. The plunger may contain trace amounts of latex.
 - (9) Avoid multi-dose medication.
- (10) Wrap blood pressure measurement connecting tubing with gauze or place cotton batting on areas of contact with patient skin, or use a latex-free cuff.
 - (11) Use Velcro tourniquets or place gauze under latex tourniquets.
- (12) Identify all ancillary activities essential for the care of the patient of the patient's latex allergy.
- (13) Order and maintain continuous use latex-free items for latex-allergic staff or frequently treated patients. Patients with myelodysplasia (defective development of any part of the

spinal cord), spina bifida or congenital urinary abnormalities are at a high risk of being latex-allergic and will be treated as such without testing.

- (14) Minimize patient contact with latex aeroallergens and latex items used by other patients and health care providers.
- (15) Patient beds, litters, chairs and exam table mattresses should be covered with a thick blanket if the latex status of the mattress, stuffing or surface cannot be determined.
- b. *Risk identification*. All patients and significant others should be questioned by the primary care provider regarding allergy to latex products. (For positive answers, consider referral for further evaluation.) Sample questions include:
- (1) Have you experienced allergic itching, erythema, swelling, shortness of breath, feeling faint, nausea, vomiting or wheezing after surgery, dental work, or contact with a latex product such as rubber gloves, balloons, toys, condoms, diaphragm or infant nipples?
 - (2) Have you undergone multiple operations?
 - (3) Do you have asthma, hay fever, eczema or recurrent hives?
- (4) Do you have rash, swelling, itching or breathing problems after eating bananas, avocados, chestnuts, kiwi, apricots, peaches, cherries, pineapple, grapes or passion fruit?
- (5) Are you exposed to latex products, especially latex gloves, during the performance of your routine job duties?
 - c. Latex Allergy Precautions-specific work areas.
 - (1) Primary care providers.
- (a) Identify a possible latex allergy through the history and physical and will refer the patient to the appropriate provider (dermatologist or allergist) for evaluation.
- (b) Ensure that latex-allergic patients and family members receive education regarding allergy and sensitivity.
- (c) If the patient is to be seen or transferred to another area, notify personnel in advance of the patient's arrival so that the appropriate equipment can be gathered and the proper environment established prior to the patient's arrival.
 - (2) Same Day Surgery.
- (a) General. Communication between Same Day Surgery, the Post-anesthesia Care Unit, Operating Room, Anesthesia Service and the patient is the best prevention of a latex-allergic reaction. A good history of allergies helps identify patients at risk for latex allergies.
- (b) Identification of latex-allergic patients. A thorough history needs to be taken if an individual has any of the risk factors described below in paragraph N-3b, above.
- (c) Pre-admission will notify the Operating Room of a latex-sensitivity patient so that a safe environment is established prior to the scheduled procedure.
- (d) Patients with latex allergies are not candidates for surgery at KACC. These patients will be referred to WRAMC.
 - (3) The Operating Room and Central Materiel Service.
- (a) The Operating Room and Central Materiel Service will follow their Latex-Safe Environment SOP.
- (b) Patients scheduled for surgery who are latex-sensitive will be managed with a latex sensitivity cart.
- (c) The Operating Room suite will be stocked with low allergen, powder-free sterile and non-sterile exam gloves. Operating Room apparel, including hats, masks and shoe covers, will be latex-free. Additionally, many sterile products are latex free; product packaging indicates the

presence or absence of latex.

- d. Latex Free alternatives. See tables N-1 and N-2, which begin on page 58.
- (1) Non-latex gloves will be available and worn at all times when caring for a latexallergic patient. For activities not requiring sterility or sterile latex-free gloves, use vinyl or nitrile.
- (2) Use a non-latex blood pressure cuff or gently wrap the patient's arm with cotton roller gauze or batting.
 - (3) Cover areas of rubber exposed stethoscope tubing.
 - (4) Use a silastic foley if a urethral catheter is ordered.
 - (5) Use vinyl glove or Velcro tourniquet in place of latex.
- e. *Patient Education*. Once the patient has been identified as latex allergic, the staff in that clinical area will—
- (1) Assess the patient and or family's knowledge of latex allergy and provide them with information based upon that assessment. Documentation of the assessment and the information provided will be made in the patient's medical record.
 - (2) Education should include a list of resources, both local and national.
 - (3) Advise the patient to wear a latex allergy identification bracelet at all times.
 - (4) Follow up consultation with the Allergy/Immunization Clinic if necessary.
- (5) In the event of an emergency, inform the health care team of a patient's allergy or sensitivity to latex.
- (6) Consult for follow up home visit for further evaluation of the environment as appropriate.
 - (7) Inform the patient to have an emergency kit at home, work or while traveling.
- (8) The MEDDAC latex allergy information point of contact is the Chief, Allergy/Immunization Clinic.

N-8. Health care personnel with latex allergies

- a. The OH Physician will refer the suspected latex-allergic employee to WRAMC Allergy and Immunology Service for Dermatology and or Allergy specialist evaluation if indicated. The employee will obtain documentation certifying latex allergy and report to Occupational Health for assessment of their work environment.
- b. Employees who are Type I latex-allergic may require assignment to a more controllable latex-safe environment.
- c. Each work area will provide latex-free products needed for the latex-allergic employee who does not require reassignment.

N-9. References

- a. National Institute for Occupational Safety and Health (NIOSH) Alert: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace, Publication No 97-135.
- b. Occupational Safety and Health Administration Technical Information Bulletin: Potential for Allergy to natural Rubber Latex Gloves and other Natural Rubber Products, April 12, 1999.

Table N-1			
Common natural rubber and dry rubber latex products found in health care facilities and homes, and alternative latex-safe substitutes (Medical) ¹			
Products that frequently contain latex	Examples of latex-safe alternatives or barriers		
Adhesive bandages	Sterile dressing with plastic tape.		
Airways, ventilatory equipment and ventilator circuits	BRANDS: Vital Signs (masks), Neoprene (Anesthesia Associates of Ohmeda, Hudson.		
Ambu bags	BRANDS: Vital Signs, Laerdol, Armstrong, Rusch, SPUR (Ambu), PMR 2 (Puriton-Bennett, Vital Blue, Respironics, Mercury Disposable Resuscitators).		
Arm boards	Cover arm board with cotton stockinette. BRANDS: Avcor non-latex armboards.		
Bandaids	Use paper tape and cotton gauze if possible. BRANDS: Active Strips (3M-caution: Packaging may contain latex), Readi-Bandages, Snoopy Band (Quantasia).		
Bed protectors (washable rubber)	Disposable underpads.		
Bite blocks	Silastic bite blocks.		
Blood pressure cuff tubing	BRANDS: Technol Orthopaedic Products Cleen Cuff (Vital Signs), Critikon, Dinamap, Perfect Balance.		
Bulb syringes	BRANDS: Medline, PVC (Davol), Rusch.		
Buretrols (contain latex diaphragm)	BRAND: B. Braun Burettes.		
C-arm drapes	Use non-latex cover. BRAND: Xomed.		
Cap, bouffant	Do not use.		
Casts: Delta-Lite Comfortable (J&J)	BRANDS: Delta-Lite S, Fabric (J&J), Fiberglass, Scotchcast soft cast.		
Catheters, leg bags, drainage systems	BRANDS: Bard Systems, Nylon Straps, PVC (Dale, Mentor, Velcro straps.		
Catheters, rectal pressure	BRANDS: Cook, Lifetech.		
Catheters, condom	BRANDS: Clear Advantage (Mentor), Silicone (Coloplast, Rochester).		
Catheters, indwelling	Use silicone or silastic. BRANDS: Silicone (Argyle, Bard, Coloplast, Kendall, Rochester, Vitaid).		
Catheters, leg bags, drainage systems	BRANDS: Velcro, nylon (Dale, Mentor Bard systems.		
Catheters, straight, Coude	BRANDS: Bard, Coloplast, Mentor, Robnel, Sherwood.		
Catheters, urodynamics	BRANDS: Bard, Cook, Lifetech, Rusch.		
Central venous catheters	BRANDS: Arrow International, Bard, Medical Parameters, B Braun.		
Chux	Cloth diapers, disposable underpads, cover with a sheet.		
Cords	Apply cotton gauze or stockingette to extremities, or wrap the cord in gauze.		
Drains, GI	BRANDS: Jackson-pratt, Hemovac (Latex inside but no patient contact.).		
Dressings: Action Wrap, Coban (3M) BDF Elastoplast	BRANDS: Dyna-Flex (J&J), Moleskin Bioclusive, Comfeel, Duoderm (Squibb), Montgomery Straps (J&J), Opsite (Coloplast), Pin Care (Hollister), Reston foam (3M) Venigard, Webril (Kendall). CAUTION: Steri-Strips, Tegaderm, Tegasorb (3M) contain latex in the packaging only.		

Table N-1 (continued)			
Common natural rubber and dry rubber latex products found in health care facilities and homes, and alternative latex-safe substitutes (Medical) 1			
Products that frequently contain latex	Examples of latex-safe alternatives or barriers		
Elastic wrap: ACE Wraps, Elastikon (J&J)	BRANDS: Elasticon Dyna-Flex, Zimmer Advan Adhesive elastic bandage, Comprilan (Jobst), X-Mark (Avcor).		
Electrode bulbs, pads, grounding	BRANDS: Baxter, 3M, Conmed, Dantec EMG, Vallylab, Vermont Med.		
Endotracheal tubes, airways	BRANDS: Berman, Mallinckrodt, Polamedco, Portex, Sheridan, Shiley, Rusch.		
Enema, ready to use (Fleet has latex valve.)	BRANDS: Baby Lax (Fleet), Bowel Management Tube, cone irrigation set (Convatec), Glvcerin, Theravac.		
Face masks	May have elastic in strap that could be replaced with trach tape. MASK BRANDS: Reliacre Exprress, King Systems Corp, SIMS/Intertech Resources, Inc. STRAP BRANDS: Ohmeda, Inc., Vital Signs.		
Feeding tubes	BRANDS: Bard, Rusch, Vygon, Entech, Dobbhoff feeding bag.		
Finger cots	Non-latex glove fingers.		
Fluid circulating war blankets	Cover and keep from skin contact.		
G-tubes, buttons	BRANDS: Silicone (Bard, MIC, Rusch, Stomate).		
Gloves	BRANDS: Vinyl, Nitrile		
Injection caps	BRANDS: B. Braun, Abbott		
IV access	BRANDS: Jelco IV catheters (all gauges). CAUTION: See "tape" for securing IV.		
IV tubing	Use plastic stopcock for all medication administration. Cover any injection ports with tape. Flush IV tubing prior to use. BRANDS: Abbott nitroglycerine tubing, Braun Burettes, Clave (ICU Medical), Gemini (IMED), Luer Lock (B. Braun), Walrus.		
Laryngeal mask airways	Use silicone. BRAND: Gensia, Inc.		
Medication vial stoppers	Remove stopper or use a 22 micron filter.		
Nasopharyngeal airways	Use polyvinyl chloride. BRAND: SIMS/Portex, Inc.		
Operating room hats, masks, shoe covers	Remove elastic band and tie with trach ties.		
Oral airways	Choose products made of polyethylene, ethylene vinyl acetate, and polypropylene. BRANDS: Hudson Respiratory Care, Vital Signs, Reliacare Express, Curity, Guedal Oral Airway.		
Oxygen cannulas, masks	Remove the elastic strap and check the valve for composition.		
Penrose drain	BRANDS: Jackson Pratt, Silicone tubing, Zimmer Hemovac		
Pneumatic compression devices	Cover legs with stockinette or Webril.		
Pulse oximeters	BRAND: Nellcor.		
Rubber reflex hammer	Cover the rubber.		
Sleeve, sterile	Do not use since they may contain elastic. Change surgical gown.		
Spacer: for MDI inhalers	BRAND: ACE spacer (Central Laboratories).		
Stethoscope tubing	Cover with scope cover. BRANDS: PVV (Armstrong) Squibb.		
Stylets	Use polyvinyl chloride or aluminum. BRANDS: Mallinckrodt Medical, Vital Signs, SIMS/Portex.		

substitutes (Medical) ¹ Products that frequently contain latex	Examples of latex-safe alternatives or barriers
Suction catheters	BRANDS: PVC (Ballard, Bectin-Dickinson, Davol, Laerdal, Mallinckrodt, Medical, Superior, Yankauer).
Syringes, disposable, auto injectable	Medications should be drawn up immediately prior to administration. BRANDS: Abboject, Abbott PCA, Baxa (feeding syringes), Epi-Pen (Center Labs), terumo syringes, TB syringes (Bectin-Dickinson). Glass syringes may be used if available.
Таре	BRANDS: Dermaclear, Dermicel, Durapore, Mastisol, Microfoam, Micropore, Transpore (3M), Scanpore (Hermal).
TED hose	Do not use.
Theraband, Therastrips	Cover with cloth, exercise putty (Roylan).
Theratubes	
Tourniquet	Wrap patient's arm with Webril or use a Vinyl glove. BRANDS: Childrens Med Ventures, Grafco, Latex-free tubing, VelcroPedic, X-Tourn strap (Avcor).
Tubing, sheeting	Elastic threat, Plastic tubing Tygon Lr-40 (Norton), sheet (JPS Elastromerics).
Vascular stockings	Compriform (Jobst).

¹ The brands listed in this table were as of the date of this publication. After the date of publication, some of the brands appearing above may no longer be valid and others may be valid that do not appear above. This table will not be updated solely to remove and add brands.

Products that frequently contain latex	Examples of latex-safe alternatives or barriers
Automobile and bicycle tires	Avoid contact with tires and tire stores.
Balls: Kooch balls, tennis balls, kickballs, basketballs, bowling balls, racquetballs, volleyballs	PVC (Hedstrom Sports Balls).
Carpet backing	Create a barrier with cloth.
Carpet & rug backing (throw rugs)	OfficeLiner (Manco 1-800-321-0253).
Chewing gum	Avoid most chewing gum (or call individual manufacturer).
Clothes with elastic in bands	Cover the elastic bands.
Computer mouse pads	Flat desk (or call manufacturer).
Condoms, contraceptive or diaphragm	Female condom (Reality), Polyurethane (Avanti).
Contraceptive sponge	Avoid, seek physician's advice on alternative methods of birth control.
Cosmetic applicator sponges	Use cotton balls.
Crutches – auxiliary pads, hand grips, tips	Cover with cloth or tape.
Dental rubber bands, root canal material	Wire springs.
Diapers, incontinence pads	Attends, cloth diapers, Drypers, First Quality, Gold Seal, Huggies, Tranquility.

Table N-2 (continued) Common natural rubber and dry rubber latex products found in health care facilities and homes, and alternative latex-safe substitutes (Non-medical) ¹			
Products that frequently contain latex	Examples of latex-safe alternatives or barriers		
Driveway sealant	Silicone caulk.		
Electric cords	Use gloves when handling.		
Envelope and stamp glue	Self-adhesive envelopes and stamps; use barrier protection on hands to avoid touching glue.		
Eye-pieces on cameras and binoculars	Cover with cloth, check with camera store or manufacturer for plastic alternatives.		
Food prepared with latex gloves	Encourage institution to use synthetic or vinyl gloves.		
Feeding nipples	Silicone (Evenflo, Gerber, MAM, Mead Johnson, Ross).		
Glue, art supplies	Carpenter's wood glue. Crayola products, Elmer's school glue, Glue Color, Glue-All, Sno-Drift paste.		
Handles, bicycle grips, racquets, tools	Cover with cloth with tape, leather handles, vinyl. Wear leather riding or racquetball gloves.		
Kitchen gloves	Cotton or vinyl liner (Allerderm, PVC MYPLEX (Magla)).		
Lottery tickets (scratch off)	Have someone else scratch ticket.		
Office, non-slip drawer liners	OfficeLiner (Macro).		
Pacifiers	Plastic, silicone, vinyl (Binky, Gerber, Infa, Kip, MAM).		
Pencil erasers	The Alternative Resource Catalog (1-800-618-3129).		
Raincoats, rubber boots	Gore-Tex coated fabrics, Neoprene-coated fabrics.		
Rubber (elastic) bands	String.		
Rubber buttons of remote controls, calculators	Avoid direct contact, check with individual manufacturer.		
Rubber plants	Avoid, use plastic plants.		
Sanitary napkins and pads	Kimberly Clark products.		
Slippers	Bring from home.		
Tarps	Plastic covering.		
Teething toys	Plastic or vinyl-covered toys.		
Toys	Contact manufacturer.		
Water toys and equipment: bathing suits, caps, goggles, masks, scuba gear	Cotton bathing suits with covered elastic trim, plastic toys, PVC.		
Weather stripping	Avoid contact.		
Wheelchair cushions and tires	Cover seats with cloth, wear gloves.		
Zippered plastic storage bags	Plain plastic bags (non-zippered), waxed paper, Zip Loc bags, Ziploc.		

¹ The brands listed in this table were as of the date of this publication. After the date of publication, some of the brands appearing above may no longer be valid and others may be valid that do not appear above. This table will not be updated solely to remove and add brands.

Appendix O Space Heater Policy

O-1. Purpose

To establish policy, procedures, responsibilities and guidelines for use of space heating devices within the MEDDAC.

O-2. Reference

Mil Specs Handbook 1191.

O-3. General

- a. Heating devices are the third leading cause of fire deaths and property loss in the United States. The electrical systems in many of the MEDDAC's buildings are presently loaded to capacity. The improper use and incorrect type of space heaters present a potential overloading of electrical services, which has been proven as a known fire hazard. According to the 2000 Edition, NFPA 101, Life Safety Code 18.7.8, "Portable space-heating devices shall be prohibited in all healthcare occupancies. Exception: Portable space-heating devices shall be permitted to be used in non-sleeping staff and employee areas where the heating elements of such devices do not exceed 212 degrees F (100 degrees C)."
- b. The use of space-heating devices should be considered a privilege, not a necessity. All non-approved space-heating devices brought into MEDDAC facilities will be reported to the appropriate supervisors, who will ensure such devices are not used and removed from the facility. The Safety Manager, with the assistance of department/division collateral duty safety officers, will randomly inspect work areas to ensure this policy has been established throughout the MEDDAC.
- c. Approvals to use space-heating devices IAW this appendix are good only for one year. Annually thereafter, an employee must resubmit the application.
- d. Based on risk analysis, the use of space heaters is restricted in MEDDAC MTF's unless all three of the following criteria are met—
 - (1) Use meets the NFPA 101 exception.
- (2) The employee has a written statement from a healthcare provider that the heater is necessary for medical reasons.
- (3) Use is approved by the Safety Office or the Safety and Environment of Care Committee.
- e. In accordance with Mil Specs Handbook 1191, the minimum allowable ambient temperature for winter months is 68° and the maximum for summer months is 78°.
 - f. Personnel should dress in accordance with weather conditions.

O-4. Responsibilities

a. *The OH Physician or designee*. The OH Physician will review documentation provided by an employee's military or civilian health care provider requesting approval of a space-heating device. The OP Physician or designee will complete the medical portion of MEDDAC Form 763 (Application for Space Heater-Heating Device) and provide feedback to the Safety Manager within five working days of the request.

- b. The Safety Manager. The Safety Manager will—
- (1) Assist the employee to initiate an application for use of a space-heating device on MEDDAC Form 763.
- (2) Advise the employee that documentation from a military or civilian health care provider is required before the MEDDAC's OH Physician or designee can certify the employee's need for the space-heating device.
- (3) Coordinate with the Facilities Manager, the OH Physician or designee, and the supervisor of the employee who submitted the request for response to the employee's application for use of a space-heating device.
- (4) Ensure a prompt response is made to each application for use of a space-heating device. A written response will be submitted to the employee within fifteen working days regarding the result of the data collection, the analysis, and the negative or positive response for use of a space-heating device.
- c. *The Facility Manager*. The Facility Manager will evaluate the area in which the employee works for compliance IAW Mil Specs Handbook 1191 and electrical requirements. This evaluation will include a check of the heating, ventilation and air conditioning system for proper operation, and, if necessary, making repairs or adjustments. Temperature readings will also be conducted for analysis. A report of findings will be reported to the Safety Manager within five working days of the request.
- d. *The supervisor and collateral duty safety representative*. The supervisor and collateral duty safety representative will—
 - (1) Provide assistance to Safety Manager and Facilities Manager upon request.
- (2) If a space-heating device use is approved, ensure it is used appropriately, turned off at the end of the shift, and unplugged from the wall receptacle.
- (3) Ensure an annual inspection of the device is performed IAW appendix F of this regulation.
- (4) Ensure the heater is clean. (Housekeeping is not responsible for cleaning space-heating devices.)
 - e. *The employee*. The employee will—
 - (1) Comply with paragraph O-4d, above.
- (2) Provide the OH Physician or designee documentation from a military or civilian health care provider regarding any alleged medical condition to justify the necessity of a space-heating device in the employee's workspace. This documentation will be provided during the initial OH appointment.

O-5. Procedure

- a. Space heater approval process.
- (1) All space heater use must be approved by the Safety Manager or the Safety and Environment of Care Committee. The Safety Manager will coordinate the approval process. Employees who request to use a portable space-heating device will schedule an appointment with the Safety Manager to complete section A of MEDDAC Form 763. (MEDDAC Form 763 is maintained by the Safety Manager.)
 - (2) The Safety Manager will—
- (a) Provide a copy of MEDDAC Form 763 to the employee and direct the employee to complete section A.

- (b) Complete section B of MEDDAC Form 763.
- (c) Coordinate with the Facility Manager to determine whether the existing building heating system is at maximum operational efficiency and to determine if the current electrical system can support the required amperage for energizing the space-heating device.
- (3) If the workplace meets the ambient air temperature (minimum of 68° in winter and maximum of 78° in summer) and meets the NFPA 101 exception requirements, the employee will be directed to obtain documentation from a military or civilian health care provider to substantiate the necessity of a space-heating device.
- (4) The Employee will schedule an initial appointment at OH. At the time of the appointment, the employee will present documentation, obtained from a military or civilian health care provider, to support the need for a space-heating device.
- (5) After reviewing sections A and B of the employee's DA Form 763 and the documentation provided by the employee's health care provider, the OH Physician will complete section C of MEDDAC Form 763 during the employee's initial visit, or as soon as possible thereafter, then forward the MEDDAC Form 763 to the Safety Manager.
- (6) Section D of MEDDAC Form 763, which is the approval/disapproval section, will be completed by the Safety Manager or the Safety and Environment of Care Committee. If a space-heating device is deemed necessary, the Safety Manager will coordinate with the employee's supervisor to obtain it and have it installed.
- b. The Safety Manager will only approve space-heating devices that meet all of the following criteria and conditions:
 - (1) Must be of a type and model approved by the installation fire department.
 - (2) Must be Underwrites Laboratories approved.
 - (3) Must have a power cord that is in excellent condition.
 - (4) Must not be plugged into an extension cord or power strip.
 - (5) Must have a temperature control that will not exceed 212°F (100°C).
 - (6) Must have an automatic shutoff switch, in case the device is tipped over accidentally.

Glossary

Section I Abbreviations ANSI	DCA Deputy Commander for Administration	FGGM Fort George G. Meade GOV
American National Standards Institute	DCCS Deputy Commander for Clini-	government owned vehicle
AMV Army motor vehicle	cal Services DD	GSA General Services Administration
AR Army Regulation	Department of Defense	HAZCOM hazard communication
СВО	DENTAC U. S. Army Dental Activity, Fort George G. Meade	hazard communication HCP
competency-based orientation CDSO	DOD; DoD Department of Defense	Hearing Conservation Program HCPM
collateral duty safety officer CFR	DOL	Hearing Conservation Program Manager
Code of Federal Regulations	Department of Labor DPW	HW hazardous waste
COR contract officer representative	Directorate of Public Works EC	IAW in accordance with
CPAC Civilian Personnel Advisory	environment of care	IH
Center DA	EMI electromagnetic interference	industrial hygiene IHPM
Department of the Army dB	EMS emergency medical services	Industrial Hygiene Program Manager
decibel	EO executive order	ILSM Interim Life Safety Measures
dBA A-weighted decibel	ESO Environmental Science Officer	ISO installation safety office
dBP peak measurement decibel	FCC	mstanation safety office

Family Care Center

JCAHO Joint Commission on Accreditation of Healthcare Organizations	OH occupational health OHC	RDTC Remedial Driver Training Course
KACC Kimbrough Ambulatory Care Center	Occupational Health Clinic OHN Occupational Health Nurse	RHL reportable hearing loss RPE
LOG Logistics Division	Occupational Health Nurse OSHA Occupational Safety and	respiratory protective equipment
LSC Life Safety Code	Health Administration PCM	SASOHI Standard Army Safety and Oc- cupational Health Inspection
MEDCOM United States Army Medical Command	PI performance improvement	SDS Same Day Surgery
MEDDAC U.S. Army Medical Department Activity ECCM	PL public law	SIR serious incident report
ment Activity, FGGM MSDS material safety data sheet	PM Preventive Medicine Service	standing operating procedure SPL
MTF medical treatment facility	PMCS preventive maintenance checks and services	sound pressure level TB MED
NARMC North Atlantic Regional Medical Command	POV privately owned vehicle	Technical Bulletin - Medical TMP transportation motor pool
NCO noncommissioned officer	PPE personal protective equipment	TWA time-weighted average
NCR National Capitol Region	PTM&S Plans, Training, Mobilization and Security Division	UL underwriters laboratory
NFPA National Fire Protection Association	RAC risk assessment code	USACHPPM U.S. Army Center for Health Promotion and Preventive
NMC not mission capable	RDT remedial driver training	Medicine

USAHC

U.S. Army health clinic

USASC

U.S. Army Safety Center

VS

Fort Meade Branch Veterinary Services

WRAMC

Walter Reed Army Medical Center

WRHCS

Walter Reed Health Care System

Section II Terms

A-weighted decibels (dBA)

Sound pressure level measured with a sound level meter set to the A-weighted network and which meets the ANSI S 1.4-1983 requirements. The A-weighting network reduces the contribution of lower frequencies, which are of less concern for hearing conservation.

change in operation

Any increase in the number of noise-exposed employees and or any technological changes in the work environment. For example: building renovations, and additional or reduced numbers of noise-hazardous equipment per 29 CFR 1910.95 (d)(3).

command, the

Within this regulation, the term "the command" includes the MEDDAC, DENTAC, and VS.

decibel (dB)

The unit of measurement used to express sound pressure level (SPL). The dB level of a sound is related to the logarithm of the ratio of sound pressure to a reference pressure. The dB has meaning only when the reference quantity is known. The internationally accepted reference pressure in acoustics is 20 uPa which corresponds to 0 dB This value is used in the most current acoustical literature. In the past, other units, including 20 micronewtons per square meter, 0.0002 microbar, and 0.0002 dynes per square centimeter, all physically equivalent to 20 uPa, have been used.

department

Within this regulation, the term "department" also includes the Laboratory, Pharmacy and Radiology services, whose chiefs do not have a division chief over them but are directly subordinate to the DCCS.

8-hour time-weighted average (TWA) sound level

A measure of the severity of the employee's workday noise environment. The TWA is an expression of the constant noise level, measured in dBA, which can potentially produce the same hearing damage over an 8-hour period, as the actual workday noise exposure. The TWA is always computed as if the TWA noise level is present for an 8-hour work shift, whether or not the workday noise lasts for 8 hours. Because the TWA is a measure of the noise environment, it does not reflect the effects of any hearing protection worn by the employees. Implicit in the TWA is a 3-dB time-intensity exchange rate

occupational medicine staff

An OH physician, audiologist, OH nurse, industrial hygienist, radiation protection officer, optometrist, and technicians of each specialty area.

OSHA reportable hearing loss (RHL)

Present when an individual has an increase in hearing thresholds \geq 25 d13 for the average of 2000, 3000, and 4000 Hz in either ear, as compared to the individual's original (first) baseline hearing test. It is reported one time and is not reported again until there is an additional increase of >25 for the average of 2000, 2000, and 4000 Hz, in the same ear as the previous increase, or if there is a change in hearing ≥25 dB for the average of 2000, 3000, and 4000 Hz in the other ear, as compared to the original baseline. For example: if the first OSHA RHL is reported in 1995 and an additional average increase of 25 dB does not

appear until 1998, the OSHA RHL would only be reportable in 1995 and 1998, *not* in the intervening years.

Ototoxin

Ear poison.

Peak measurement decibels (dBP)

Unit used to express the peak SPL of impulse noise. It is equal to 20 times the common logarithm of the ratio of the highest instantaneous sound pressure to a reference pressure of 20 uPa.

Unit Hearing Conservation Officer

The individual designated in writing to manage the unit's HCP and to serve as a point of contact.